CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS.

New York, October 25, 1906.

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CONSTRUCTION NEWS.

PLANS AND SPECIFICATIONS ON FILE.

The following Plans (P.), Specifications (S.), and Bidding Sheets (B. S.) may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York:

Bids close.	Work.	Place.	On file.	See issue.
Oct.				
*29	Conduit, embnkmt.	Boston, Mass.	S. & B. S.	10-11
Nov.				
1	Engineering supplies.	Panama.	S. & B. S.	10-18
*1	Portland cement.	Lascruces, N. Mex.	S. & B. S.	10-18
*1	Dam, etc	Mitchell, Neb.	P., S. & B. S.	10- 4
3	Pumping mchny.	Norfolk, Va.	S.	10-11
*15	Dam, excavation.	N. Yakima, Wash.	P., S. & B. S.	9-27
*15	Canal, dam, tunnels.	N. Yakima, Wash.	P., S. & B. S.	9-27
*15	Steel bars, etc.	Lascruces, N. Mex.	S. & B. S.	10-18
*20	Bridge.	Winnipeg, Man.	P., S. & B. S.	10- 4

*Work advertised in Engineering News.

LIST OF CONTRACTS PENDING.

LIGHT, HEAT AND POWER PLANTS.

Bids close. — Work. — Place. — On file. — See issue.

Oct. 25. Equipment, Chilocco, Okla..............Oct. 18
Oct. 29. Equipment, Orange, N. J..............Oct. 4
Advertised, Eng. News, Oct. 11 and 18.
Oct. 29. Lighting, Sacramento, Cal..............Oct. 25
Oct. 30. Electric supplies, Washington, D. C....Oct. 25
Nov. 1. Lighting, Canastota, N. Y..............Oct. 11
Nov. 2. Apparatus, Cincinnati, Ohio..............Oct. 18
Nov. 10. Light plant, Lynchburg, Va..............Oct. 25
Nov. 12. Light plant, Mobile, Ala..............Oct. 25
Nov. 13. Electric supplies, Washington, D. C....Oct. 25

BRIDGES.

Oct. 25. **Bridge, Atlanta, Ga**..............Sept. 13
Oct. 26. **Bridges, Wauseon, Ohio**..............Oct. 11
Oct. 26. **Bridge, Portland, Pa**..............Oct. 11
Oct. 29. **Bridges, Toledo, Ohio**..............Oct. 11
Oct. 29. **Bridge, Avella, Pa**..............Oct. 18
Oct. 29. Bridges, San Jose, Cal..............Oct. 25
Oct. 30. Bridges, Marysville, Kan..............Oct. 25
Oct. 31. Bridges, Kansas City, Mo..............Oct. 18
Nov. 1. Bridge, Mount Gilead, Ohio..............Oct. 25
Nov. 1. Bridge, Appleton, Wis..............Oct. 25
Nov. 2. Bridge, Reading, Pa..............Oct. 25
Advertised, Eng. News, Oct. 25.
Nov. 2. Painting bridges, Indianapolis, Ind......Oct. 25
Nov. 3. Bridge, Celina, Ohio..............Oct. 25
Nov. 5. Bridges, Wichita, Kan..............Oct. 25
Nov. 5. Bridge, Rensselaer, Ind..............Oct. 25
Nov. 5. Bridges, Versailles, Ind..............Oct. 25
Nov. 5. Retaining walls, Portersville, Cal......Oct. 25
Nov. 5. Repairs, Santa Barbara, Cal..............Oct. 25
Nov. 5. Bridge, San Jose, Cal..............Oct. 18
Nov. 6. **Bridge, Peoria, Ill**..............Oct. 11
Advertised, Eng. News, Oct. 11 and 18.
Nov. 8. **Bridges, Atlanta, Ga**..............Oct. 4
Nov. 8. Bridge, Independence, Mo..............Oct, 25
Nov. 14. Bridge floor, Columbus, Ohio..............Oct. 25
Nov. 20. **Bridge, Winnipeg, Man**..............Oct. 4
Advertised, Eng. News, Oct. 4 to 25.
Nov. 29. Bridge, Gilroy, Cal..............Oct. 25

BUILDINGS.

Oct. 25. Factory, Philadelphia, Pa..............Oct. 18
Oct. 25. Mail lift, Kansas City, Mo..............Oct. 18
Advertised, Eng. News, Oct. 18.
Oct. 25. Baths, Lawrence, Kan..............Oct. 18
Oct. 26. School, Chicago, Ill..............Oct. 25
Oct. 26. Post-office, Hamilton, Ont..............Oct. 26
Oct. 29. School, New York, N. Y..............Oct. 25
Oct. 29. City hall, Little Rock, Ark..............Oct. 18
Oct. 29. School addition, New York, N. Y......Oct. 18
Oct. 30. **Elevator, New York, N. Y**..............Oct. 11
Advertised, Eng. News, Oct. 11 and 18.
Oct. 30. Library, University, N. Dak..............Oct. 25
Oct. 31. School, Cheyenne Agency, S. Dak.......Oct. 11
Oct. 31. Academy, Waterloo, Que..............Oct. 11
Nov. 1. **Officers' quarters, Fort Dupont, Del**....Oct. 4
Advertised, Eng. News, Oct. 4 to 18.
Nov. 1. Gymnasium, Fishers Island, N. Y......Oct. 18
Nov. 1. Officers' quarters, West Point, N. Y...Oct. 18
Advertised, Eng. News, Oct. 15 and 25.
Nov. 1. Church, New Orleans, La..............Oct. 25
Nov. 5. Laundry building, San Francisco, Cal..Oct. 25
Nov. 5. School, Lafayette, La..............Oct. 25
Nov. 5. Printing plant, Seymore, Ind..............Oct. 25
Nov. 8. Officers' quarters, etc., Fort Leavenworth, Kan....Oct. 25
Nov. 8. City hall, Carutherville, Mo..............Oct. 18
Nov. 8. Storehouses, Dover, N. J..............Oct. 18
Nov. 8. **Court-house, Bloomington, Ind**..............Oct. 11
Nov. 8. **Quarantine buildings, Portland, Me**......Oct. 11
Advertised, Eng. News, Oct. 11 and 18.
Nov. 9. **Hardware, Indianapolis, Ind**..............Oct. 11
Nov. 10. Theater, Chicago, Ill..............Oct. 25
Nov. 12. **Heating apparatus, Superior, Wis**.......Oct. 18
Nov. 12. **Steam heating plant, Hayward, Wis**......Oct. 18
Nov. 19. Elevator, Burlington, Vt..............Oct. 25
Advertised, Eng. News, Oct. 25 and Nov. 1.
Nov. 21. Marble work, Washington, D. C..........Oct. 25
Advertised, Eng. News, Oct. 25 to Nov. 8.
Dec. 20. **Plans and specifications, Shreveport, La**..Oct. 4

WATER SUPPLY AND IRRIGATION.

Oct. 25. **Cisterns, New Orleans, La**..............Oct. 18
Oct. 27. **Water-works, Scribner, Neb**..............Oct. 18
Oct. 27. **Water gate, Washington, D. C**..........Oct. 11
Oct. 29. Pipe, Atlantic City, N. J..............Oct. 18
Advertised, Eng. News, Oct. 18.
Oct. 31. Supplies, Walla Walla, Wash..............Oct. 25
Oct. 31. Pipe, Lancaster, Ohio..............Oct. 11
Oct. 31. Water-works, Whiterocks, Utah........Oct. 4
Oct. 31. Boilers, New York, N. Y..............Oct. 18
Nov. 1. Laying pipe, New York, N. Y..........Oct. 25
Nov. 2. Pipe, Bloomington, Ill..............Oct. 25
Nov. 3. Water tunnel, Chicago, Ill..............Oct. 18
Advertised, Eng. News, Oct. 18 to Nov. 1.
Nov. 5. Pumps, Preston, Ont..............Oct. 25
Nov. 6. Water-works, Lander, Wyo..............Oct. 25
Advertised, Eng. News, Oct. 25 and Nov. 1.
Nov. 7. Water mains, New York, N. Y..........Oct. 25
Nov. 7. Pumping station, New York, N. Y......Oct. 18
Nov. 8. Pump, Yonkers, N. Y..............Oct. 11
Advertised, Eng. News, Oct. 11.
Nov. 9. Tunnel, Boston, Mass..............Oct. 18
Advertised, Eng. News, Oct. 18 and 25.
Nov. 12. Cast-iron pipe, Holyoke, Mass..........Oct. 11
Advertised, Eng. News, Oct. 18.
Nov. 12. Boilers, Boston, Mass..............Oct. 25
Advertised, Eng. News, Oct. 25 and Nov. 1.
Nov. 14. Filtering materials, Philadelphia, Pa....Oct. 18
Advertised, Eng. News, Oct. 18 and 25.
Nov. 15. Reservoir, Ft. Wingate, N. Mex..........Oct. 18
Nov. 21. Pumping engine, Brockton, Mass.......Oct. 18
Advertised, Eng. News, Oct. 18 to Nov. 8.

SEWERAGE.

Oct. 25. Sewers, Denver, Colo..............Oct. 18
Oct. 26. Sewers, Beach City, Ohio..............Oct. 25
Oct. 30. Sewer, Des Moines, Iowa..............Oct. 18
Oct. 31. Sewers, Sheridan, Wyo..............Oct. 18
Oct. 31. Drain, Regina, Sask..............Oct. 18
Oct. 31. Sewers, New York, N. Y..............Oct. 25
Oct. 31. Outlet, New York, N. Y..............Oct. 25
Oct. 31. Sewers, Buffalo, N. Y..............Oct. 25
Nov. 5. Sewers, Greenville, Ala..............Oct. 25
Nov. 5. Sewer, Brookville, Ind..............Oct. 25
Nov. 3. Sewers, Decatur, Ill..............Oct. 25
Nov. 5. Sewer, Canton, S. Dak..............Oct. 25
Nov. 6. Sewers, Lander, Wyo..............Oct. 25
Advertised, Eng. News, Oct. 25 and Nov. 1.
Nov. 6. Sewers, Escanaba, Mich..............Oct. 25
Nov. 6. Sewer, Virginia, Minn..............Oct. 25
Nov. 6. Sewers, Cleveland, Ohio..............Oct. 18
Nov. 6. Sewers, Dawson, Ga..............Oct. 11
Nov. 7. Filters, Philadelphia, Pa..............Oct. 11
Advertised, Eng. News, Oct. 11, 18 and Nov. 1.
Nov. 7. Sewer, Cincinnati, Ohio..............Oct. 18
Nov. 7. Sewers, Grand Haven, Mich..............Oct. 25
Advertised, Eng. News, Oct. 25 and Nov. 1.
Nov. 7. Sewers, Baltimore, Md..............Oct. 25
Advertised, Eng. News, Oct. 25.
Nov. 8. Sewers, Mobile, Ala..............Oct. 25
Nov. 8. Pump, Yonkers, N. Y..............Oct. 11
Advertised, Eng. News, Oct. 11.
Nov. 9. Sewer, Boston, Mass..............Oct. 25
Nov. 10. Sewers, Merchantville, N. J..............Oct. 25
Advertised, Eng. News, Oct. 25 and Nov. 1.
Nov. 12. Sewers, Cincinnati, Ohio..............Oct. 25
Nov. 13. Sewers, Cleveland, Ohio..............Oct. 25
Nov. 19. **Sewer and outfall, Los Angeles, Cal**.....Oct. 11
Advertised, Eng. News, Oct. 11 and 18.
Nov. 19. Sewer, Los Angeles, Cal..............Oct. 18

STREETS AND ROADS.

Oct. 25. Grading, Estacada, Ore..............Oct. 11
Oct. 26. Paving, New York, N. Y..............Oct. 18
Oct. 26. Road repairs, Hamden, Conn..............Oct. 25
Oct. 27. Grading, Colebrook, Conn..............Oct. 25
Oct. 29. Paving, Carrollton, Ill..............Oct. 25
Oct. 29. Grading, Vancouver, Wash..............Oct. 18
Oct. 29. Sidewalks, Syracuse, Ind..............Oct. 18
Oct. 29. Grading, Tacoma, Wash..............Oct. 18
Oct. 30. Paving, Des Moines, Iowa..............Oct. 18
Oct. 30. Grounds, New York, N. Y..............Oct. 25
Oct. 31. Paving, Evansville, Ind..............Oct. 25
Oct. 31. Macadam, Kansas City, Mo..............Oct. 18
Oct. 31. Road work, Albany, N. Y..............Oct. 11
Advertised, Eng. News, Oct. 11 to 25.
Oct. 31. Roadway, Grand Rapids, Mich..........Sept. 27
Oct. 31. Road, Byron, Mich..............Oct. 4
Nov. 1. Macadam, Highlands, N. J..............Oct. 4
Advertised, Eng. News, Oct. 4 to 25.
Nov. 1. Plank road, Jersey City, N. J..............Oct. 25
Nov. 2. Paving, New York, N. Y..............Oct. 25
Nov. 3. Grading, Colorado Springs, Colo........Oct. 18
Nov. 5. Gravel roads, Crownpoint, Ind..............Oct. 18
Nov. 5. Paving, Johnstown, N. Y..............Oct. 18
Nov. 5. Macadam, etc., Webb City, Mo..........Oct. 25
Nov. 7. Roads, Bedford, Ind..............Oct. 25
Nov. 8. Paving, Mobile, Ala..............Oct. 25
Nov. 8. Gravel, New York, N. Y..............Oct. 25
Nov. 8. Gravel roads, Chehalis, Wash..............Oct. 18
Nov. 9. Paving, Troy, N. Y..............Oct. 25
Nov. 10. Roads, Port Townsend, Wash..............Oct. 25
Nov. 12. Paving, Cincinnati, Ohio..............Oct. 25
Nov. 12. Road work, Brazil, Ind..............Oct. 25

MISCELLANEOUS CONTRACTS.

At once. Railway extension, Louisville & Eastern..Oct. 25
Oct. 25. **Moorings, Tompkinsville, N. Y**..........Oct. 11
Oct. 25. **Test borings, New York, N. Y**..........Oct. 18
Oct. 25. Cement, St. Andrews, Man..............Oct. 18
Oct. 26. Bulkhead, New York, N. Y..............Oct. 18
Oct. 27. Revetment wall, Owen Sound, Ont.......Oct. 11
Oct. 29. **Conduit, embankment, Boston, Mass**....Oct. 11
Advertised, Eng. News, Oct. 11 and 18.
Oct. 29. Crematory, Delaware City, Ded.........Oct. 4
Advertised, Eng. News, Oct. 4 to 18.
Oct. 29. Ditches, Alexandria, Minn..............Oct. 18
Oct. 29. Bulkhead, New York, N. Y..............Oct. 25
Oct. 30. Drains, Sac City, Iowa..............Oct. 18
Oct. 30. **Naval supplies, Washington, D. C**.......Oct. 4
Nov. 1. **Dam, etc., Mitchell, Neb**..............Oct. 11
Advertised, Eng. News, Oct. 4 to 25.
Nov. 1. Timber flooring, New York, N. Y......Oct. 18
Nov. 1. Portland cement, Lascruces, N. Mex....Oct. 18
Advertised, Eng. News, Oct. 18 and 25.
Nov. 1. Engineering supplies, Panama..........Oct. 18
Nov. 3. Crane, Charleston, S. C..............Oct. 18
Nov. 3. Light vessel, Washington, D. C..........Oct. 18
Nov. 6. **Subway substructure, Toronto, Ont**.......Oct. 4
Advertised, Eng. News, Oct. 4 and 11.
Nov. 6. **Railway, Spain (Foreign)**..............Aug. 30
Nov. 6. Naval supplies, Washington, D. C......Oct. 25
Nov. 7. Subway, Reading, Pa..............Oct. 25
Advertised, Eng. News, Oct. 25.
Nov. 8. **Canal work, Albany, N. Y**..............Oct. 11
Advertised, Eng. News, Oct. 11 to Nov. 1.
Nov. 8. Tunnel, Boston, Mass..............Oct. 25
Nov. 9. **Canal work, Albany, N. Y**..............Oct. 11
Advertised, Eng. News, Oct. 11 to Nov. 1.
Nov. 10. Light vessel, Washington, D. C..........Oct. 18
Nov. 10. Wooden barges, New Orleans, La........Oct. 25
Nov. 13. Naval supplies, Washington, D. C.....Oct. 25
Nov. 13. Cranes, Washington, D. C..............Oct. 11
Nov. 15. Canal, dam, tunnels, N. Yakima, Wash..Sept. 27
Advertised, Eng. News, Sept. 27 to Nov. 1.
Nov. 15. Dam, excavation, N. Yakima, Wash.....Sept. 27
Advertised, Eng. News, Sept. 27 to Nov. 1.
Nov. 15. Steel bars, etc., Lascruces, N. Mex.....Oct. 18
Advertised, Eng. News, Oct. 18 to Nov. 8.
Nov. 16. Inclined railway, Niagara Falls, N. Y...Oct. 25
Nov. 23. Steel horses for dams, Wheeling, W. Va.Oct. 25
Advertised, Eng. News, Oct. 25 to Nov. 15.
Nov. 24. Wharves, New Orleans, La..............Oct. 25
Dec. 12. Ship canal, Panama..............Oct. 18
Dec. 1. **Garbage reduction, Spain (Foreign)**.....Oct. 11
Advertised Eng. News, Oct. 4 and 11.
Mar. 18. ('07). **Tunnel, New Zealand (Foreign)**..Sept. 13
Advertised, Eng. News, Sept. 13 to Mar. 14.
Apr. 12 (07). Ditches, Brookings, S. Dak..........Oct. 18
No date. **21 miles grading, Natchez & Eastern Ry**.Oct. 11
Advertised, Eng. News, Oct. 11 and 18.

CIVIL SERVICE EXAMINATIONS.

Oct. 30. **Topographic Draftsman, Wash., D. C**...Oct. 11
Oct. 30. **Cartographic Draftsman, Wash., D. C**...Oct. 11
Oct. 30. **Clerk Draftsman, Washington, D. C**....Oct. 11
Oct. 30. **C. E. & Supt. Construction, Wash., D. C**.Oct. 18
Oct. 31. **Chief, Water Bureau, Philadelphia, Pa**..Oct. 11
Advertised, Eng. News, Oct. 11.
Nov. 7. **Topographic Draftsman, Panama**.......Oct. 18
Nov. 14. Electrician, Wyoming..............Oct. 25
Nov. 17. Chainman, Albany, N. Y..............Oct. 25
Advertised, Eng. News, Oct. 25.
Nov. 17. Leveler, Albany, N. Y..............Oct. 25
Advertised, Eng. News, Oct. 25.
Nov. 17. Rodman, Albany, N. Y..............Oct. 25
Advertised, Eng. News, Oct. 25.
Nov. 17. Inspector, Albany, N. Y..............Oct. 25
Advertised, Eng. News, Oct. 25.
Nov. 20. Arch. Draftsmen, Washington, D. C.....Oct. 25
Nov. 20. Jr. Arch. Draftsmen, Washington, D. C.Oct. 25
Nov. 20. Engr. Draftsmen, Washington, D. C.....Oct. 25
Nov. 20. Elec. Engrs. & Dftsmen, Wash., D. C...Oct. 25
Nov. 20. Heat. & Ventil. Draftsmen, Wash., D. C.Oct. 25
Nov. 21. Mech. Draftsmen, Washington, D. C..Oct. 25

RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

BIG CREEK & TRINITY VALLEY.—Company has been incorporated in Texas to build a railway from Big Creek, Liberty County, Tex., to Egypt, ten miles. Capital stock, $10,000. Julian Ranger, Big Creek; D. W. Kempner, M. O. Koppert, J. H. Steele and M. Kleberg, of Galveston; and S. T. Swinfold and B. H. Brown, of Houston, are the directors.

BLADEN & NORTHERN.—Incorporated in North Carolina to build a railroad from a point on the Atlantic Coast Line in Cumberland County or Bladen County, east of the Cape Fear River, to White Oak, Bladen County, 20 miles. Incorporators: Wm. Moncure, Raleigh, N. C.; T. L. Chisholm and D. E. McIver, of Sanford, N. C., and others.

CANADIAN PACIFIC.—This company will construct a line from Proton Station, Ont., to Southampton, Ont., it is said.

CHICAGO, JOLIET & KANSAS CITY.—Press reports state that on Oct. 16, at a special meeting in Chicago, the stockholders voted to increase the capital stock from $1,000,000 to $12,000,000, of which $2,000,000 will be preferred and $10,000,000 common stock. It was announced that the company would be prepared to reveal its plans for the construction of a road from Chicago to Kansas City on or about Nov. 1, but for the present, for competitive reasons, it is necessary to keep them secret. Property for terminals, it is asserted, has been purchased in both cities named. An issue of $10,000,000 of bonds was also authorized. Construction probably will begin by January 1 on the road, which is projected to run from Chicago by way of Joliet, Princeton, and Toulon, to Keithsburg, Ill., where connection will be made with the Iowa Central, and thence in a general southwesterly direction to Kansas City, Mo. There will be branches in Illinois to Morris, Marseilles, La Salle and Kewanee. The mileage in Illinois is 246 miles. A contract is said to have been entered into with New York financiers for the sale of the bonds on the Illinois division and contracts for construction have been awarded. J. C. Eden, formerly of the Great Northern Ry. Co., is Pres., and B. F. Hardesty is Ch. Engr. C. A. Denham, 608 Rector Bldg., Chicago, will be Construction Engineer.

CINCINNATI, BLUFFTON & CHICAGO.—John C. Curtis, Gen. Mgr., Portland, Ind., informs us, under date of Oct. 17, that contracts will be let as soon as surveys are completed for building its proposed extension from Portland to Huntington, Ind., 23 miles. Capital is ready. S. H. Bracey is Pres. and D. C. Dunlap is Ch. Engr., both at Chicago.

COLORADO & NORTHERN.—A branch of the Denver, Northwestern & Pacific Ry. will be built by a company which has been incorporated in Colorado under the name of the Colorado & Northern Ry., from a point near Hayden north about 20 miles to coal fields. Eventually it is proposed to extend the road north to Hahns Peak, Colo., and thence to Encampment, Wyo., and on the south from Hayden to Twenty-Mile Park, and thence to Bear Creek, terminating near Pallas, Colo. The road will open up about 10,000 acres of coal fields north of Hayden. The engineers have been at work for some months and it is stated that construction will begin at once. Capital stock, $1,000,000. Benj. L. Dorsey is Pres.; A. A. Johnson, Vice-Pres. and Gen. Mgr.; Marshall E. Johnson, Secy. and Treas. Headquarters are Denver, Colo.

ELKHORN SOUTHERN.—This company has been chartered in Tennessee. Geo. L. Carter is Pres.; J. C. Stone, Secy. and Treas.; J. Norment Powell, M. J. Caples, J. M. Ferguson, all of Bristol, Tenn., are directors. Capital, $25,000. The principal terminal places to and from which it is proposed to construct the railroad are from a point on the line between the States of Virginia and Kentucky, at or near the "Breaks" at the Big Sandy River. The estimated length of the main line of the road proposed is 40 miles, and the main line and branches are intended to be constructed through the counties of Dickenson, Buchanan and Russell, in the State of Virginia.

INDIAN CENTRAL.—A charter has been granted this company in Oklahoma. Company's headquarters will be at Oklahoma City. Company intends to build a line eastward from Ponca, Okla., through Kay County, the Osage country and the Cherokee Nation; thence south through the Cherokee, Creek and Choctaw Nations, crossing the Red River into Lamar County, Tex.; thence southeast to Paris, Tex. A branch line is provided from a point where the main line crosses the Red River, northwest through the Choctaw and Chickasaw Nations, and the counties of Pottawatomie, Cleveland and Oklahoma to Oklahoma City. The total mileage is 460, 120 of which are in Oklahoma. The incorporators are Pleasant Porter, of Muskogee; E. T. Hathaway, O. D. Halzell, Ed Overholser and William C. Reeves, of Oklahoma City.

LAKE SUPERIOR SOUTHERN.—Announcement is made by M. C. Phillips, Pres., Oshkosh, Wis., that this proposed road from Huron Bay, Mich., on Lake Superior, to Madison, Wis., will be 290 miles in length, of which 75 miles will be in Michigan and 215 miles in Wisconsin. The route is via Lake Michigamme, Mich., Florence, Wis., and through the Fox River Valley to Madison. The entire line has been surveyed. Contract for construction has been awarded to the ELDENBELL CONSTRUCTION CO., 42 Broadway, New York. There are 35 miles of old grade from Huron Bay to Champion, Mich. E. B. Priest is Ch. Engr., Oshkosh, Wis.

LOUISVILLE & EASTERN.—We are officially advised that bids are asked by the Marion Contract & Construction Co. for building an extension from Beechwood, Ky., to Frankfort, Ky., a distance of about 46 miles. Proposals must be made on grading, ballast, bridges, tracklaying and surfacing (including ties, rails and fastenings), and fencing right-of-way. Complete plans and specifications are on file in the office of the Chief Engineer, J. B. Walker, at the general offices of the company, Lyndon, Ky. This is an extension of time as advertised for Oct. 18.

NORTH COAST RY.—Announcement is made by Robert E. Strahorn, Pres., at Spokane, Wash., that this line, between Spokane and the Puget Sound country, will form trans-continental connections with the Chicago, Milwaukee & St. Paul, the Union Pacific and Northern Pacific railroads and that construction work westward will be pushed with all possible speed. Financial arrangements for the project have been completed, New York and Washington capital being interested to the extent of more than $5,000,000. Connection with the C., M. & St. P. will be made in the Cow Creek country, 30 miles southwest of Spokane, and with the Chicago & Northwestern via the Walla Walla line, over Snake River; with the Union Pacific and Northern Pacific at Connell, Wash.; with the Spokane-International, a branch of the Canadian Pacific, in Spokane, and with the Western Pacific by way of the Portland line. These lines will give lower grades and easier curvatures than can be obtained otherwise.

ORANGE & KEYSVILLE.—Robert T. Hubbard, Dillwyn, Va., Pres., informs us that proposals are now being received by the company for building proposed 40-mile line from Dillwyn to Keysville, Va., via Farmville. Greater part of right-of-way is secured. Survey is nearing completion. Ten miles of grading are completed but no work is being done at present. Noted on Oct. 4.

OREGON & WASHINGTON.—We are advised by E. C. Hawkins, Ch. Engr., Seattle, Wash., that the proposed railway line will be about 180 miles long, extending from Portland, Ore., to Seattle. William Crooks, at Portland, is Pres. Surveys have been made and capital secured. Right-of-way is being obtained. There will be considerable heavy earth work and bridges. Contracts for construction will be let probably next week.

PORTLAND & SEATTLE.—PORTER BROS. & WELSH, of Duluth, Minn., have secured contract for building 75 miles of this company's line, which is to extend west from Spokane, Wash., to the Snake River.

QUEBEC & LAKE ST. JOHN.—A party of New York capitalists, looking for investment, accompanied by G. Lemoine, Pres., and J. G. Scott, Gen. Mgr., of the Q. & L. St. J. Ry., recently made a trip to Roberval, Que., to look over the ground for the extension of this railroad to James Bay. They express themselves as favorably impressed with the country and disposed to back the scheme. The proposed line will run through the Chibugamoo mineral district, where rich deposits of gold, silver, copper and asbestos have been located. A. E. Doucet is Ch. Engr., at Quebec, Que.

ROSWELL & EASTERN.—Incorporated in New Mexico to build a railroad from Roswell east to the Texas state line, to connect with a road to be built in Texas. Capital stock, $100,000. Incorporators: Kirby S. Woodruff, Charles W. Defreest, Richard F. Barnett, George T. Veal and W. T. Sells, all of Roswell, N. Mex.

ELECTRIC RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

ALBANY, N. Y.—The Common Council has passed an ordinance authorizing the United Traction Co. to extend its line through Ten Broeck St. and Livingston Ave. to New York Central Ave., about two miles in length. Work is to be completed by Jan. 1, 1908. Herschel Benedict is Ch. Engr.

HORNELLSVILLE, N. Y.—The Hornellsville, Bath & Lake Keuka Railway Co. was incorporated last week. It is to be operated by electricity, and is to be 46 miles long, extending from Seneca St., Hornellsville, to the plank road in the town of Jerusalem. It will extend through Steuben and Yates Counties. The capital is $1,000,000. The directors are John P. Turk, of Hammondsport; Fred. W. Hastings, Wilson R. Campbell, Moses Davidson, Dr. W. H. Phillips, Gabriel H. Parkhurst, and Frank N. Di Camp, of Bath; Leslie D. Whiting, of Canisteo; and Charles G. Wheeler, of Hammondsport.

NIAGARA FALLS, N. Y.—Bids are asked until noon, Nov. 16, by Edward H. Perry, Supt., Niagara Falls, for the construction work of a new station and the reconstruction of the Inclined Railway at the N. Y. State Reservation, Niagara Falls. Drawings and specifications may be consulted and blank forms of proposals obtained at the office of the Superintendent of the Reservation, or by application to G. L. Heins, State Arch., Capitol, Albany, N. Y. One bid was received for this work on Oct. 6. See item in last week's issue.

PEEKSKILL, N. Y.—John S. Ladd, Pres. of the Putnam & Westchester Traction Co., Peekskill, informs us that contracts will be let about Dec. 1 for building the line to Oregon, N. Y., 3¾ miles in length. Surveys are made and right-of-way obtained. Previously noted.

MEDIA, PA.—The Philadelphia & Garrettford St. Ry. Co. will build a line connecting this city and Philadelphia. H. Hayes Aikens, Arcade Bldg., Philadelphia, is Pres. and Pur. Agt.

MIDDLETOWN, PA.—We are informed by E. M. Raymond, Secy. and Treas. of the Royaltown & Elizabethtown St. Ry. Co., Real Estate Trust Bldg., Philadelphia, that about 80% of right-of-way has been obtained for the construction of its proposed line to connect Middletown and Mt. Joy, with extensions to Lancaster and Lebanon. The road will be 52 miles in length. Surveys are made, but capital is not yet secured. William Trimble is Pres., at Philadelphia.

WILMINGTON, DEL.—John W. Endean, with headquarters at Smyrna, is endeavoring to organize a company to build an electric railway to extend from Wilmington to Lewes. Mr. Endean is arranging to incorporate a company to be known as the Diamond State Rapid Transit Co., and secure necessary franchises. It is to be incorporated with a capital stock of $1,250,000, and bonded for $2,500,000.

MORGANTOWN, W. VA.—Edward Herd, Mgr. of the Morgantown & Southern Ry. Co., at Morgantown, informs us that contracts will be let in a few weeks for building its line, which will run from Morgantown to Fairmont, W. Va., 28 miles. Surveys are under way and right-of-way is partly obtained. Capital is secured. J. W. Wiles is Pres. and John L. Johnson Ch. Engr., at Morgantown. Company was recently incorporated with $100,000 capital.

CHARLESTON, S. C.—D. E. Baxter & Co., 27 William St., New York, have completed specifications for power and line equipment of the Charleston & Summerville Electric Railway, for which they have contracted for the construction and equipment work, which is to begin at once. The electric generating station will be two 800-HP. Snow gas engines, max. capacity 920 HP. Two 600-KW. single-phase 25-cycle generators; 6,600 volts field type of 25%, upon normal rating, to have a regulation of not less than 8%; two motive-driven exciter sets, with transformers 70 KW., switchboard with bus, bars below at exciter panel. One lamp bracket and shade; one field motor with 6-point V.-M. receptacle; two ammeters; two rheostat hand wheels; two D. P.-S. T. switches; one D. P.-D. T. switch for throwing battery on either exciter; switch studs for the purpose of boiling; one S. P.-S. T. equalizer switch; two circuit breakers with reverse current relays for use with field exciter battery; the exciter field rheostat to have proper range for use with Tirrill regulator; generator panels complete; feeder panels complete, motor starting panel complete; exciter regulating battery; catenary construction with 120-ft. span; 3/0 hard drawn copper trolley wire; corrugated porcelain insulators, standard stud bracket, stud strain bracket; section break; strain insulators. All iron work is to be galvanized; poles are chestnut or cedar of ample size; galvanized anchor rods; 4/0 bonds. The outlined plan is for a single-phase railway, which will run from the Battery in Charleston to Summerville, a distance of 27 miles. We are officially advised that the right-of-way passes with easy curves over a practically level country, the maximum grade being less than 1%. Power-house will be located about nine miles outside of this city, where two steam railroads intersect, thus giving railway connection for coal.

ATLANTA, GA.—The Atlanta, Griffin & Macon Electric Ry. Co. has petitioned the City Council for an extension of its local franchise from 30 to 50 years. Noted on Sept. 6 and Sept. 27.

MILLTOWN, GA.—Charles G. Peeler, Mgr. South Georgia Electric Ry. Co., Milltown, advises us that company expects to let contracts about Nov. 15 for building a line from Milltown to Valdosta, Ga., 20 miles. Permanent survey will be made at once. Right-of-way and capital have been secured. The work will require very little grading, as it will be through very level country, traversing one of the richest sections of southern Georgia, via the Banks Lake, the water of which will be used for motive power, developing about 700 HP.

ST. PETERSBURG, FLA.—Regarding the item noted last week, R. H. Thomas, Secy., states that the length of line to be built soon by the Bayboro Investment Co. is 1⅛ miles, along Tampa Bay, south. C. L. Howard is Pres.; H. A. Murphy, Vice-Pres.; T. K. Wilson, Treas. It will connect with the Atlantic Coast Line and the Seaboard Air Line via steamer and the St. Petersburg & Gulf trolley line.

HATTIESBURG, MISS.—The Hattiesburg Traction Co., we are officially advised, has let contract to the ILLINOIS STEEL CO., of Atlanta, for rails. Contracts for construction will be let at once. As previously noted in Construction News, this company will commence immediately the construction of seven miles of street railway; 7-in. 85-lb. girder rails will be used in the paved section of the city, and 40-lb. rails in the suburbs. The company will purchase line supplies, cars and equipment, including 150-HP gas engine. Edward J. O'Beirne, Empire Bldg., Atlanta, Ga., is Engr. and Purchasing Agent.

CINCINNATI, OHIO.—Guy W. Mallon, of Cincinnati, advises us that the Cincinnati, Reading & Middletown Electric Ry. Co. will be organized soon. As noted on Sept. 13, Mr. Mallon "is interested in a project to build a line from Rose Hill, in Avondale, north through Sharon and Middletown to Franklin, a distance of about 40 miles. The line will connect with the lines of the Cincinnati Traction Co. at Rose Hill. The road will be part of the Cincinnati Northern Traction Co. and the Mill Creek Valley lines."

MASSILLON, OHIO.—The Massillon & Northern Railroad Co., has been incorporated in Ohio, with capital of $10,000, to build an electric line direct from Massillon to Akron, following the route of the Ohio Canal. The private right-of-way which has been secured offers many inducements to branch lines, the chief one being to Turkeyfoot Lake. The incorporators are: William A. Schuster, Herman W. Loeffler, C. F. Dow, George W. Kratsch and L. A. Koons.

SPRINGFIELD, OHIO.—The City Council committee has recommended an ordinance granting the Springfield Ry. Co. a franchise for construction of a new line through the manufacturing district in northeastern part of the city. J. H. Miller is Gen. Mgr.

CLEVELAND, OHIO.—The Cleveland, Bedford & Yeauga Lake Traction Co. has been incorporated by L. A. Smart and others, of Cleveland.

COLUMBUS, OHIO.—The Columbus Magnetic Springs & Delaware Interurban Railway Co. has been incorporated with $400,000 capital. The officers are: W. M. Galbraith, Pres.; Chris. McGee, Jr., Vice-Pres. and Treas.; W. N. Embert, Secy. J. H. Leonard and J. L. Horn are directors.

DES MOINES, IOWA.—The American Electric R. R. Co., of this city, has been incorporated, with $20,000, "to promote, acquire, build, equip, operate and maintain a standard-gage railroad, to be operated by electricity, gasoline, steam or other motive power through Winterset and Greenfield, Iowa, west to Council Bluffs, and from Winterset in an easterly direction to Muscatine and Davenport, Iowa." The officers are: [illegible] W. Baker, Pres.; J. D. Pollard, Vice-Pres. [illegible] Treas.; Charles F. Castleman, Secy., of Des Moines. It is stated that the company will at once commence surveys for route for the road between Council Bluffs and Muscatine, and that it is the intention of those interested in the project to have everything ready for the commencement of actual construction work some time next year. The company will construct a branch line from Winterset to Des Moines, so as to have an entrance into this city, provided the Des Moines, Winterset & Creston Interurban Railway Co. does not construct its line from Des Moines to Winterset. If the other line is constructed, then the new company will try to make arrangements for traffic rights into Des Moines. Another company is to be organized in Illinois to construct a line from Muscatine or Davenport to Chicago, and the two lines will be operated as one system, thus giving a continuous electric line from Chicago to Council Bluffs, Iowa.

SEATTLE, WASH.—Merle J. [illegible]man, 302 Broadway, New York, a civil engineer, has applied for a franchise for a street railway system on several streets in this city. C. E. Muckler is also interested. Among the terms of the franchise is a clause that the company agrees to complete its line to Tacoma, Wash. It provides that the company shall pay to the city 2% of its gross receipts for the first ten years, 4% of the gross receipts for the next ten years and 6% of the gross receipts for the third ten years. The franchise is to expire on Dec. 31, 19[illegible]. The franchise provides for the deposit of $1,000 as a forfeit should the company fail to complete the road on or before May 1, 19[illegible], and it stipulates that work shall be commenced upon the road on or before the first of next May. The company offers to construct and maintain a draw bridge over the canal waterway 22 ft. wide and to vest the title in such bridge in the city of Seattle.

VACAVILLE, CAL.—Melville Dozier, of San Francisco, has been granted an electric railway franchise in this city.

PRINCE ALBERT, SASK.—The Prince Albert Street Railway Co. has asked the Council for a 20-year franchise. It will spend $80,000 on plant, track and cars within three years, and will supply power to the city as long as its franchise remains in force, at 25% less than it now costs the city.

LIGHT AND POWER PLANTS.

The names of parties awarded contracts are printed in capital letters.

ATTLEBORO, MASS.—WILEY & FASS, Fitchburg, Mass., have been awarded the contract to erect a factory and power-house at North Attleboro, for the H. F. Barrows Co. Newton C. Bond, 912 Carney Bldg., Boston, is Arch.

NORTH ATTLEBORO, MASS.—I. M. & C. BUCKLEY, of Worcester, have secured the contract for the construction of the power-house for municipal electric light plant. W. P. Whittemore is Mgr. and Supt. of plant.

GLASTONBURY, CONN.—The Glastonbury Power Co. has awarded to J. G. WHITE & CO., 49 Exchange Pl., New York, the contract for the erection of the hydro-electric plant at Colton Hollow, on the Roaring Brook.

WINDSOR LOCKS, CONN.—The Northern Connecticut Power Co., which has taken over the Windsor Locks Electric Light Co., of this place; the Enfield Electric Light & Power Co., and the Enfield Gas Co., has perfected arrangements to consolidate the business of the two electric companies. The contract has been let for a consolidated plant, which will be located near the present Windsor Locks plant, and which will furnish electric light and power for Windsor Locks, Thompsonville and Enfield. The dimensions of the brick structure will be 52 × 125 ft., and the contract calls for the completion of the plant in January. The company is planning to develop an extensive electric and gas light service in the towns of Windsor Locks, Enfield and East Windsor.

PITTSFIELD, CONN.—At a recent meeting of the Board of Directors of the General Electric Co., C. C. Chesney, Vice-Pres. of the Stanley Co., was voted authority and funds to double the size and capacity of company's power plant here. The estimated cost is $50,000.

WALLINGFORD, CONN.—At a special town meeting held recently it was voted to appropriate $8,500 for extending and improving the municipal electric lighting plant, making the total amount available for improvements $14,000. The new extensions to the plant will consist of a water wheel, generators and other appliances.

CENTERPORT, N. Y.—The Centerport Improvement Society, it is reported, is contemplating the establishment of a municipal water-works and electric light plant.

BETHEL, PA.—A large dam on Blue Mountain will be constructed, at a cost of $8,000, to furnish power to operate an electric light plant, which will supply power and light to Bethel, Millersburg, Strausstown and Rehrersburg.

PENNSBURG, PA.—D. K. Graber, Burgess, has vetoed the ordinance which was passed by the Town Council, submitting to a vote of the citizens at the November election, the question of issuing $10,000 of bonds for a municipal electric light plant.

PHILADELPHIA, PA.—JOHN R. WIGGINS & CO., 1215 Filbert St., City, have been awarded the contract by Wilson, Harris & Richards for the erection of a 3-story brick power-house, 90 × 140 ft., for the United Gas Improvement Co., to cost $1[illegible],000.

PHILADELPHIA, PA.—The WM. STEELE & SONS CO., 1000 Arch St., have been awarded the contract to erect a 2-story dye-house and power-house at Howard and Clearfield Sts. It is to be of brick, 50 × 200 ft.

ANNAPOLIS, MD.—Bids were opened Oct. 17 at the Office of the Secretary of the Navy, Washington, D. C., for reinforced concrete work in the power-house at the U. S. Naval Academy, Annapolis, Md. The following bids were received: Buckley Realty Construction Co., New York, $55,000; Baltimore Ferro-Concrete Co., Baltimore, $54,930; Scofield Co., Philadelphia, $116,224 (modified bid).

WASHINGTON, D. C.—Bids are asked, by the Bureau of Supplies and Accounts, Navy Dept., Washington, D. C., until Oct. 30, for furnishing various electrical supplies to several navy yards.

Bids are also asked, until Nov. 13, by this department for furnishing various electrical supplies at several navy yards. H. T. B. Harris, Paymaster Gen., U. S. N.

MANASSAS, VA.—The J. C. M. LUCAS CO., 1307 Continental Trust Bldg., Baltimore, Md., has contract, at $7,557, for installation of electric light plant. O. E. Newman is Chn.

LYNCHBURG, VA.—Bids are asked by Leon Goodman, Chn. of Committee on Lighting, until Nov. 10, for a complete arc lighting plant driven by both steam and water power. The work includes structural steel and concrete work, alternating-current generators, switchboard, water wheels, high speed engines, boilers, pumps, piping, steel stack, rope drives, friction clutches, iron stairways, ladders, arc lamps, regulators, lamp-suspension appliances, weather-proof wire and all necessary fittings and appliances. Lamar Lyndon is Consult. Engr., 80 William St., New York, N. Y.

SOUTH BOSTON, VA.—South Boston Electric Light & Power Co., operating electric light plant, is arranging for the development of the water power at Hyco Falls, eight miles from here, recently purchased, establishing an electric plant for transmitting the power by electricity to South Boston, Roxboro and Durham, N. C., and later to Oxford and Henderson, N. C. The company has a capital stock of $100,000, which will be increased. R. S. Barbour is Gen. Mgr.

CAYCE, S. C.—It is reported that the Seaboard Air Line Railway has purchased 100 acres of land on which to locate shops and electric power-house. W. L. Seddon, Portsmouth, Va., is Ch. Engr.

CALHOUN FALLS, S. C.—Patrick Calhoun, 30 Broad St., New York, and associates will organize company for the development of water power at Calhoun Falls, recently purchased. Engineers are now at work on the details.

CHARLESTON, S. C.—See under Electric Railways.

BRUNSWICK, GA.—The Fore River Shipbuilding Co. will erect a power-house and warehouse, at a cost of $100,000.

DOUGLAS, GA.—Town has voted affirmatively the proposed $12,500 bond issue for extending and building water-works and electric light plant.

SHEFFIELD, ALA.—The Mussel Shoals Hydro-Electric Power Co. has been incorporated with a capital stock of $1,000,000 for the purpose of developing the water powers of Mussel Shoals and Tennessee River by constructing two dams across the river, according to plans which have been approved by the Government. Frank S. Washburn, of Nashville, Tenn., is Pres.; J. W. Worthington, of Sheffield, is Vice-Pres., and William H. Lindsay, of Nashville, Tenn., is Secy.-Treas.

MOBILE, ALA.—Bids are asked by Patrick J. Lyons, Mayor, until Nov. 12, for the construction of a municipal electric light plant.

BRANDON, MISS.—See under Water Supply and Irrigation.

CHATTANOOGA, TENN.—The Chattanooga Gas Co. has been incorporated with a capital of $1,250,000 by George E. McGee, J. B. Sizer, H. A. Thornton, J. P. Hoskins and Robert Pritchard. The company will expend $75,000 on improvements to the local plant which it has acquired.

NATCHEZ, TENN.—It is reported that a municipal electric light plant to cost $75,000 is to be erected here.

WATERTOWN, TENN.—Bids are asked for the erection of an electric light plant by the Watertown Light & Power Co. W. L. Goodhard is Pres.

WATERTOWN, TENN.—Watertown Light & Power Co., organized by W. L. Goodhart and associates, will establish electric light and power plant, which will be equipped with two 50-HP. boilers, feed-water heaters, pumps, 75-HP. Corliss engine, either direct-connected or belted to a 50-KW. generator. A plant for the manufacture of all kinds of turned goods, such as handles, insulator pins, neck yokes, to cost $5,000, will be operated in connection.

BOWLING GREEN, KY.—The Green River Hydro-Electric Co., of Bowling Green, Ky., will develop the water power at Lock No. 5, Green River. H. Von Schon, of Detroit, Mich., is Consult. Engr.

MADISONVILLE (Cincinnati post-office), OHIO.—See under Water Supply and Irrigation.

TERRE HAUTE, IND.—The Terre Haute Traction & Light Co. is not contemplating the erection of a steam condensing tunnel under the Wabash River, as was reported in the issue of Oct. 4. It is, however, building an intake well extending about 30 ft. into the river, which is to be built of concrete. G. F. Wells is Gen. Mgr.

INDIANAPOLIS, IND.—The Board of Public Works has rejected all bids for a steam heating plant to be placed in the city hospital. The lowest bid was by Kirkoff & Co., $10,745. New bids are now being asked.

CHICAGO, ILL.—The WARREN CONSTRUCTION CO., Monadnock Block, City, was recently awarded the contract for construction of transformer station on the south side of the main drainage channel at Southwestern Ave., at $43,000.

MARSHFIELD, WIS.—An ordinance providing for the issuance of $35,000 of bonds for improvements to the electric light plant and waterworks has been passed. M. G. Fleckenstein is City Clk. O. L. Douchel is Supt. of municipal electric light and power plant.

WAPELLO, IOWA.—The proposed plant of the Wapello Electric & Power Co. is to cost $10,000. O. Vaught is Pres. and Mgr.

LIBERAL, KAN.—At a recent meeting of the City Council a franchise was granted for an electric light plant. A company will be organized under the name of the Liberal Electric Light & Power Co., and will install a plant of about 100-KW. capacity for commercial lighting. The company will be in the market for equipment and machinery for the plant. T. J. McDermott is in charge of the work.

FULTON, MO.—Bonds have been voted and sold for the erection of water-works and electric light plant. Estimated cost, $15,000 to $20,000. Jacob Wenger is City Engr.

JACKSONVILLE, TEX.—The Jacksonville Ice & Electric Co. has been incorporated with $75,000 capital stock, by Charles A. Zilker, William Watkin and L. H. Vanderwerf.

WICHITA FALLS, TEX.—The Citizens' Electric Light & Power Co. has completed its organization, with the following officers and directors: J. D. Avis, Pres.; T. J. Taylor, Vice-Pres.; E. P. Walsh, Secy.-Treas. J. D. Avis, T. J. Taylor, E. P. Walsh, Alex Kahn, G. W. Wigham and Ed. Howard are directors. Charter has been applied for.

WEATHERFORD, OKLA.—The Weatherford Electric Light & Power Co., capital $10,000, has been chartered here. Incorporators are E. E. Balcomb, R. L. Tate and C. A. Galloway.

SACRAMENTO, CAL.—Bids are asked, by M. J. Desmond, City Clk., until 8 p. m., Oct. 29, for lighting the streets of Sacramento for a term of one year from date of Nov. 1, 1906.

MONTREAL, QUE. — The CANADIAN WESTINGHOUSE CO. has secured the contract for the electrical equipment for the addition to the power plant of the Montreal Power & Light Co. The machinery is for the power station on the Soulanges Canal on the St. Lawrence River, and consists of three 3,750-KW. alternating-current, revolving field generators, direct connected to water turbines; also two 150-KW. direct-current, 125-volt exciter and thirteen 2,500-KW. oil-insulated water-cooled transformers.

TORONTO, ONT.—Twenty-five municipalities in Ontario have applied to the Hydro-Electric Power Commission for power. The minimum demand of these applications aggregates 68,100 HP. As rapidly as possible the commission will furnish the various municipalities with complete information as to approximate cost of supplying these demands. The complete list is as follows: Toronto, London, St. Thomas, Berlin, Galt, Woodstock, Guelph, Waterloo, Preston, Stratford, St. Mary's, Paris, Hespeler, Brantford, Orangeville, Brampton, Lucan, Parkhill, Leamington, Cottam, Richmond Hill, Belleville, Brockville and Ottawa.

FORT FRANCIS, ONT.—Plans and specifications of electric light system are being prepared by John Galt, C. E., of Toronto.

DAWSON, YUKON.—The Canadian-Klondike Co., Ltd., will spend $600,000 in the installation of a big power system.

BRIDGES.

The names of parties awarded contracts are printed in capital letters.

SALEM, MASS. — At the office of the County Commissioners at Salem, on Oct. 15, the bids were opened for the new Kernwood bridge, which is to be built from Salem to Ryal Side, crossing Bass River. The appropriation is $100,000, but the bids received are over the amount appropriated. In order to decide what will be done in the matter the Mayors from Beverly and Salem will meet with the County Commissioners to consider if the matter will be taken to the Legislature for the appropriation of more money. Of the $100,000 appropriated for the construction of the bridge, $4,500 has been spent for plans and surveys. The bids were as follows: William L. Miller, 19 Milk St., Boston, $106,940; New Jersey & West Virginia Bridge Co., New York, N. Y., $117,586; Pitman & Brown, 255 Derby St., Salem, $79,279, which includes everything except the steel draw, while the other bids include the entire construction.

NEW YORK, N. Y.—The following bids were received Oct. 18, by the Park Board, for constructing a rubble stone foot bridge in the Botanical Garden in Bronx Park: John B. Malatesta, 3169 Jerome Ave., $13,995; T. A. Haggerty, 143 Liberty St., $30,000; Guidone & GaIardi, 1 Madison Ave., $16,572; Leslie McHarg & Co., 199 Broadway, $16,915; Gallo & Pittelli, 127 Mulberry St., $17,047; Belino & Merritt Co., Tuckahoe, N. Y., $14,383; D. D. Leahy, 1446 Prospect Ave., $11,000; N. W. Ryan Construction Co., 106 East 23d St., $21,635. Moses Herrman is Pres.

Plans have been submitted by the Department of Bridges for the Hudson-Fulton Memorial Bridge over Spuyten Duyvil Creek, which will cost $3,000,000. J. W. Stevenson is Comr. of Bridges.

NEW YORK, N. Y.—See Streets and Roads.

SHARON, PA.—The Carnegie Steel Co. is figuring on building a new steel bridge across the Shenango River just below the blast furnaces, and plans for this are being made. It will cost about $25,000, and will be about 200 ft. long.

FRANKLIN, PA.—The CANTON BRIDGE CO., Canton, Ohio, has the contract for construction of an iron bridge for the Venango County Commissioners, Franklin. I. W. Phillips is Comr.

WASHINGTON, PA.—A steel trestle is to be built over the Pittsburg, Cincinnati, Chicago & St. Louis Ry. at Washington, Pa., and across several streets in that city by the Baltimore & Ohio Railroad Co. The contract for this work has been awarded to a Baltimore concern. D. D. Carothers is Ch. Engr.; William Graham is Asst. Engr. Bldgs. and Bridges.

PITTSBURG, PA.—The Northside Board of Trade is considering the construction of a bridge is to connect Allegheny with McKees Rocks. It is estimated that a bridge at this point will cost about $400,000.

READING, PA.—We are officially advised that on Oct. 19, L. H. FOCHT, of Reading, secured contract to construct a reinforced bridge, having a 60-ft. span, at $7,347. H. M. Davis is County Engr.

READING, PA.—Bids are asked until 10 a. m., Nov. 2, by H. F. Livingood, County Comptroller, for building a concrete arch bridge in Hereford Township, Berks County, Pa. (Advertised, Engineering News.)

HOWARDSVILLE, VA.—We are officially informed that the ROANOKE BRIDGE BUILDING CO., Roanoke, Va., has contract to construct bridge at Howardsville over the James River for the Howardsville Toll Bridge Co. Joseph K. Irvine, Howardsville, is Secy.; F. E. Nolting, Richmond, Va., is Treas.

RALEIGH, N. C.—It is reported that the Raleigh & Pamlico Sound R. R. Co. will shortly place a contract for a 1,500-ft. viaduct.

KNOXVILLE, TENN.—W. J. OLIVER, who has contract to construct bridge across the Holston River, has sublet the contract to HARMON KREES.

HENDERSON, TENN.—The city of Henderson has awarded contract for building an overhead bridge across the Mobile & Ohio Railroad to JOHN D. KEITH and E. A. MOFFITT, of Jackson.

HEIDELBERG, KY.—It is reported that the Louisville & Atlantic R. R. Co. will build a bridge over the Kentucky River at Heidelberg, in order to reach the Sturgeon Creek coal fields, in Lee County. R. N. Hudson is Gen. Mgr., Versailles, Ky.

CELINA, OHIO.—Bids are asked until 1 p. m., Nov. 3, by T. A. Weis, County Audr., for constructing substructure and superstructure for a steel or concrete bridge over the Wabash River, in Granville Township. The bridge will have one span and will be 60 ft. long.

MOUNT GILEAD, OHIO.—Bids are asked until Nov. 1, by the Board of County Commissioners, for erecting steel bridge across Alum Creek, in Peru Township. W. C. McFarland is County Audr.

YOUNGSTOWN, OHIO.—Bids for the construction of the flooring for the McGuffey St. bridge were opened by the Commissioners on Oct. 10, and are as follows: Capital Construction Co., of Columbus, plan A, $17,400; plan B, $17,000; plan C, $13,500; plan D, $12,152; plan F, $16,862; plan G, $13,500; plan H, $17,695. The Schofield Co., Pennsylvania Bldg., Philadelphia, Pa., bid for cedar blocks, $29,890. The Brown-Hunter Co., Youngstown, bid for flooring same as at present, $7,220; for block flooring, $20,274; asphalt block on concrete base, $15,840.

COLUMBUS, OHIO.—Bids are asked until Nov. 14, by the Board of County Commissioners, for constructing new floor system for the Broad St. bridge, over the Scioto River, at Columbus. W. C. Cussins is County Audr.

COLUMBUS, IND.—The County Commissioners have let a contract to C. W. FOLGER for construction of bridges over Touch Creek and over Cook's Creek.

INDIANAPOLIS, IND.—Bids are asked by the Commissioners of Marion County, until 10 a. m., Nov. 2, for painting various bridges throughout the county. C. J. Clark is County Audr.

RENSSELAER, IND.—Bids are asked until noon, Nov. 5, by James N. Leatherman, County Audr., for erecting a wooden pile bridge, 150 ft. long and 16 ft. wide, in Wheatfield Township.

VERSAILLES, IND.—Bids are asked by Nicholas Volz, County Audr., until 1 p. m., Nov. 5, for the construction of a wagon bridge over Graham Creek, west of New Marion, in Shelby Township; bridge to be of two 40-ft. spans with stone arch, or one 80-ft. span of concrete, and 16-ft. roadway. Bids for cement arch will also be considered. Bids are also asked for the construction of a bridge over Western Creek in Adams Township; bridge to be of one 30-ft. span and 16-ft. driveway. Bidders may submit their own plans and specifications with bid.

SYCAMORE, ILL.—The CONTINENTAL BRIDGE CO., 557 Monadnock Block, Chicago, Ill., has contract, at $5,000, to construct a steel bridge here. E. L. Spring is City Clk.; W. M. Hay is Engr.

CHICAGO, ILL.—The Illinois Central R. R. Co. has placed an order with the AMERICAN BRIDGE CO., Monadnock Block, for 700 to 800 tons of steel.

APPLETON, WIS.—Bids are asked by the City Clk., until 2 p. m., Nov. 1, for superstructure work, complete, of counterbalance highway swing bridge, at the east end of John St. The bridge will be 138 ft. long. Charles H. Gillett is City Surv.

DECORAH, IOWA.—We are officially advised that at a meeting of the County Board of Supervisors of Winneshelk County, held Oct. 15, the contract for steel and concrete bridge work for the year 1907 was awarded to J. G. RADCLIFF, of Waukon, Iowa.

MARYSVILLE, KAN.—Bids are asked until Oct. 30, by the County Commissioners of Marshall and Nemeha Counties, at the office of Charles W. Kern, Marysville, for constructing a 60-ft. bridge and a 40-ft. bridge.

WICHITA, KAN.—Bids are asked until 5 p. m., Nov. 5, by the City Council, for constructing ten bridges, varying in length from 46 to 80 ft. R. N. Dorr is City Clk.

ORD, NEB.—It is reported that the contract for constructing a 62-ft bridge with 30-ft. span; also one 60-ft. bridge with 30-ft. span, has been awarded to the CANTON BRIDGE CO., of Kansas City, Mo. Rudolph Sorensen is County Clk. Bids were opened Oct. 10.

INDEPENDENCE, MO.—Bids are asked until Nov. 8, by the County Clerk, at Independence, for constructing a rubble stone bridge or reinforced concrete arch over Dyke's Branch, in Township 48. Oscar Koehler is Road and Bridge Comr.

KANSAS CITY, MO.—The Chicago, Burlington & Quincy Ry. Co. will at once begin the construction of a bridge here across the Missouri River, to cost more than $1,000,000. This bridge will take the place of the Hannibal bridge, built 50 years ago, which has been condemned by the Government engineers having pronounced its piers unsafe. Engineers are already at work on the new bridge, and it will be completed in one year. It will be built of steel, on stone piers. W. L. Breckinridge is Ch. Engr.; C. H. Cartlidge is Bridge Engr., Chicago.

We are officially advised that the contract for steel trestle on Broadway, over Kansas City Bottoms, for Southwest Missouri Railroad Co., has been awarded to BARTLETT STEEL CO., of Joplin, Mo.

RULE, TEX.—The Brazos River Bridge Co., with a capital of $10,000, has been chartered here for the purpose of constructing a toll bridge across the Brazos River 3½ miles from Rule. The incorporators are: George S. Link, J. W. Kelly, J. L. Jones, W. L. George and Charles Welch.

AUSTIN, TEX.—The Commissioners Court has awarded to C. Q. HORTON the contract to construct the bridge over Onion Creek at Doyle Crossing, at $9,490.

PORTLAND, ORE.—The Southern Pacific Co. is replacing 32 wooden bridges on the Shasta route, between Ashland and Portland, with steel structures. W. Hood is Ch. Engr.; G. W. Rear is Gen. Bridge Inspector, both of San Francisco.

GILROY, CAL.—Bids are asked until Nov. 29, for constructing a concrete bridge over Coradero Creek at Gilroy, on the Monterey Road, to consist of two 30 and one 40-ft. span. Estimated cost, $15,000. J. G. McMillan is County Surv., San Jose.

SANTA ANA, CAL.—It is reported that the Pacific Electric Ry. Co. has submitted two plans for a bridge to be built across Santiago Creek, at Main St. One plan provides for a bridge 36 ft. wide, to cost about $11,000, and the other 21 ft., to cost about $8,500. George E. Pillsbury is Ch. Engr., Los Angeles; H. E. Huntington, 71 Broadway, New York, N. Y., is Gen. Mgr.

PORTERSVILLE, CAL.—Bids are asked until Nov. 5, for construction of concrete retaining wing and abutment walls and piers for a bridge. M. L. Weaver, Visalia, is Engr.

LOS GATOS, CAL.—RICHARD FERRELL has secured contract, at $3,775, for construction of bridge at Los Gatos.

SAN JOSE, CAL.—Bids are asked until 11 a. m., Oct. 29, for construction of concrete and stone bridge over Carneader Creek, on the Monterey Road. Henry A. Pfister is Clk.

Bids are asked until Oct. 29, by the Supervisors of Santa Clara County, for constructing a stone and concrete bridge over San Tomas Creek, at Virginia Ave.

SANTA BARBARA, CAL.—Bids are asked by the Board of Supervisors of the County of Santa Barbara, until Nov. 5, for repairing the bridge across the Santa Ynez River, known as the Surf Bridge in Road District No. 4. C. A. Hunt is Clk.

ST. GEORGE, N. B.—The Department of Public Works is considering the construction of a bridge across the Magaguadavic River, near St. George. Hon. C. H. La Billois is Ch. Comr., Bd. of Wks., Fredericton, N. B.

MONTREAL, QUE.—The Canadian Pacific Ry. Co. has awarded contract to the CANADIAN BRIDGE CO., Walkerville, Ont., for 19,000 tons of fabricated steel. C. N. Monsarrat, Montreal, is Engr. of Bridges.

The Montreal Bridge & Terminal Co. is promoting an enterprise to construct a bridge at Montreal over the St. Lawrence River, and a union railway station at the end of the bridge. The bridge will be of cantilever type, with a span about 1,500 ft. long, and a clear heading of about 150 ft. It will be of the double-deck pattern, and will afford accommodation for three railway tracks, two trolley tracks, two roadways, and two footpaths. The railway tracks will occupy the whole upper deck, as the trolleys and vehicles will need a quicker descent to the streets of the city. This part of the bridge will touch land at about St. Catherine St., while the upper portion will be continued for fully three-quarters of a mile further, where the terminal will be erected. The bridge will probably be the heaviest per foot ever erected. F. S. Williamson, who is associated with Sir Douglas Fox, of London, England, in the work, states that already the surveying work for the bridge has been practically completed. John Kennedy is Ch. Engr. of Harbor Comrs.

SASKATOON, SASK.—The contract for erecting the steel superstructure of the traffic bridge over the Saskatchewan River at Saskatoon has been awarded by the Provincial Department of Public Works to the CANADIAN BRIDGE CO. of Walkerville, Ont. The contract price is slightly in excess of $64,000. The bridge provides for a 20-ft. roadway, with provision for street car tracks and a water pipe-line to connect Nutana with Saskatoon, and a bracket for a sidewalk when it is required. The concrete substructure is to be completed by Dec. 1.

BUILDINGS.

The names of parties awarded contracts are printed in capital letters.

BURLINGTON, VT.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., Nov. 19, for an electric passenger elevator in the U. S. Post-Office and Custom House in this city.

QUINCY, MASS.—Bids were received on Oct. 18 for a school in this city. Seventeen bids were received. The two lowest bids were: Marr Bros., 95 Milk St., Boston, $60,895; P. H. Jackson, Brackton, $62,267.

PROVIDENCE, R. I.—The members of the First Church (Scientist) intend erecting at Meeting and Prospect Sts. a $100,000 church.

ALBANY, N. Y.—JOHN J. KELLY, 186 Sheridan Ave., has been awarded the contract for the erection of a 3-story school building at Second and Swan Sts. It is to be of brick and of fireproof construction. M. L. & H. G. Emory, Bible House, New York, are Archs.

YOUNGSTOWN, N. Y.—Bids were opened Oct. 19 for the erection of barracks and quarters at Fort Niagara and contracts have not yet been awarded. Electric lighting, plumbing and steam-heating, bath-room fixtures and lavatories will be required. There are to be four 2-story buildings of brick and concrete. Cost of buildings, $165,000; equipment, $25,000.

HEMPSTEAD (L. I.), N. Y.—The following was the lowest bid received Oct. 18 for the construction of a public school: Ansel & Kerwin, Hempstead, $48,979. J. Warner Allen is Arch.

NEW YORK, N. Y.—Chas. H. Peckworth, 415 Hudson St., was the lowest bidder for the construction of a building for a hook and ladder company, to be located on Ralph Ave., near Bergen St., Boro. of Brooklyn. His bid was $45,445.

The Manhattan Leasing Co. will erect at St. Nicholas Terrace and Convent Ave. a 10-story apartment house, at a cost of $400,000.

The National Biscuit Co. will erect a 2-story building, 165 × 100 ft., on Pacific St., near Grand Ave., Brooklyn, at a cost of $75,000. A. G. Zimmerman, of Chicago, is Arch.

Bids are asked until 11 a. m., Oct. 29, by C. B. J. Snyder, Supt. of School Bldgs., for improvements at Morris high school; for installing heating and ventilating apparatus for additions to public school 34, on Victor St. and Amethyst Ave.; also in new public school 86, on Flushing Ave., near Grand St., Maspeth; for the general construction of new public school 88, on Elm Ave., Fresh Pond Road and Halset St., Fresh Pond, Boro. of Queens.

NEW YORK, N. Y.—A 12-story fireproof apartment house, 79 × 100 ft., will be erected by the 76th Street Co. at West End Ave. and 76th St. Estimated cost, $425,000.

PLEASANTVILLE, N. Y.—The Hebrew Sheltering Guardian Society, of New York City, will erect new buildings for its asylum.

LAKE PLACID, N. Y.—An addition will be built to the Ruisseaumont Hotel. An electric light plant will be installed.

TRENTON, N. J.—H. A. Hill, Arch., is preparing plans for a 3-story, brick, stone and steel, high and manual training school of fireproof construction, for the Board of Education. Estimated cost, $150,000.

ALTOONA, PA.—The 5-story building of Oliver Rathert was recently destroyed by fire, causing a loss of $500,000. It will probably be rebuilt.

PHILADELPHIA, PA.—The CHARLES McCAUL CO., 10 West Eleventh St., has received the contract for the erection of the public school at Second and Wolf Sts., for the Board of Education. It is to be a 4-story, brick, stone and steel building, of fireproof construction, to cost $232,720.

CRAMP & CO., Commonwealth Bldg., have been awarded the contract for the erection of a public school at Green and Carpenter Sts., for $98,156. It is to be a 3-story, brick, stone and steel building.

PHILADELPHIA, PA.—P. J. HURLEY, 1216 Chancellor St., has the contract for the erection of the William Penn Theater at Lancaster and Fairmount Aves. for G. A. Wegeforth, Mgr. of the Grand Opera House.

JOHNSTOWN, PA.—CRAMP & CO., Commonwealth Bldg., Philadelphia, have been awarded the contract for the erection of a 6-story store building, to be erected for the Penn Traffic Co. Estimated cost, $350,000.

BALTIMORE, MD.—The tobacco warehouse to be erected by the Maryland State Tobacco Warehouse Building Commission at Charles, Perry, Conway and Light Sts., is to be an 8-story fireproof building, 155 × 310 ft. Estimated cost, $300,000. Noted in issue of Oct. 4.

The contract for the erection of a 6-story, brick and steel department store building, of fireproof construction, at 311-13-15 Marion St., for Bernheimer Bros., has been awarded to E. D. PRESTON, 140 West Fayette St. Estimated cost, $150,000.

A $500,000 Y. M. C. A. building is to be erected here at Franklin and Cathedral Sts.

WASHINGTON, D. C.—Bids are asked until Nov. 21 for interior marble work for the rotunda and main stair hall section of the Senate office building. Elliott Woods, Supt. U. S. Capitol Building and Grounds. (Advertised, Engineering News.)

WASHINGTON, D. C.—Bids were opened Oct. 18, at the office of Bernard R. Green, Supt. of Construction, U. S. National Museum, Washington, D. C., for the construction of the foundation and pier work of the National Museum. Bids were received as follows: E. Saxton, 841 Bladensburg Rd., Washington, $40,800; Atlas, Lehigh, Dragon, or Vulcanite cement; Pavarini & Wyne, Munsey Bldg., Washington, $39,700, Sayler's Atlas or Old Dominion cement; Ambrose B. Stannard, St. James Bldg., New York, $37,768, Atlas, Alpha, or Lehigh cement; Brennan Construction Co., 3056 K St., N. W., Washington, $31,900, any desired brand of cement; Cranford Paving Co., 2620 E St., N. W., Washington, $44,850, Lehigh, Vulcanite, Old Dominion, or Dragon cement.

The contract for the erection of a bank and office building, 50 × 160 ft., for the Union Trust Co., has been awarded to the GEORGE A. FULLER CO., Munsey Bldg. Cost, $600,000.

The Randolph Hotel Co., 1328 New York Ave., will be incorporated with Christian Heurich, R. T. Warwick, C. E. Wood, Franklin V. Killian, John F. Wilkins, Frank P. Burke and James Lansburgh as trustees to build and operate hotel, to be erected at Pennsylvania Ave. and 14th St., N. W. The structure will be twelve stories in height and have 350 rooms, and will cost about $400,000. Architects are now preparing competitive plans for the building, to be submitted Nov. 5.

RICHMOND, VA.—The high school building to be erected, for which Chas. K. Bryant is preparing plans, will cost from $400,000 to $500,000. The structure will be 180 × 220 ft., fireproof construction.

CONCORD, N. C.—Contract for the erection of two cotton mills and 200 tenement houses for the Cannon Mfg. Co., at Kannapolis, seven miles from here, was awarded to T. C. THOMPSON & BRO., Birmingham, Ala. Contract involves $350,000.

COLUMBIA, S. C.—Shand & La Faye, of this city, have been commissioned to prepare plans for proposed court-house for Richland County, to cost between $75,000 and $100,000.

NEW ORLEANS, LA.—John T. O'Leary was the lowest bidder at $194,900 for the erection of proposed library building.

Bids are asked, until Nov. 1, by W. W. Heard, Chn. Bd. of Trustees of the First Baptist Church, for the erection of a new church at Charles Ave. and Delachaise St. Andrew J. Bryan, 708 Hennen Bldg., is Arch.

LAFAYETTE, LA.—Bids are asked by Dr. T. G. Girard, Chn. Bldg. Com., until Nov. 5, for the erection of a high school building. Andrew J. Bryan, 708 Hennen Bldg., New Orleans, is Arch.

MEMPHIS, TENN.—It is reported that contracts have been awarded for the erection of the $450,000 annex to the Peabody Hotel. It is to be 46 × 150 ft., of fireproof construction. Chighizola, Hanker & Cairns, Scimitar Bldg., are Archs.

AVONDALE (Cincinnati post-office), OHIO.—George T. Alter has secured an option on the Van Antwerp homestead, corner of Forest and Lewisham Aves., and plans for a 600-room hotel are being made by Samuel Hannaford & Sons, Archs. The building will cost $500,000.

COLUMBUS, OHIO.—The contract for the erection of a store and apartment building, 60 × 205 ft., for Fred W. Schumacher, Vice-Pres., Peruna Drug Co., has been awarded to WALKER SMITH, Douglas Block. Frank L. Packard, New Hayden Bldg., is Arch. Estimated cost, $100,000.

LAFAYETTE, IND.—The Trustees of Purdue University will ask for bids for the construction of a new gymnasium building as soon as plans are completed. Wing & Mahurin, Ft. Wayne, are Archs.

CHICAGO, ILL.—It is reported that H. EILENBERGER & CO., 153 La Salle St., have been awarded the contract by Marshall & Fox., Archs., First National Bank Bldg., for the erection of a clubhouse on Plymouth Place, between Jackson Boulevard and Van Buren St., for the Chicago Automobile Club. Cost, $150,000. Noted in issue of Oct. 18.

CHICAGO, ILL.—Bids are asked until Oct. 26, by the Board of Education, for the construction of additions to be made to the Patrick Henry school at Eberly and West Cullon Aves. Estimated cost, $125,000. Dwight H. Perkins, Tribune Bldg., is Arch.

The Potter Palmer estate, 1300 First National Bank Bldg., has acquired property at the southeast corner of Michigan Boulevard and 22d St., on which the estate contemplates the erection of a large hotel in place of the Palmer House, which has been acquired by John Wanamaker, of Philadelphia. It is estimated that the hotel will cost $2,000,000.

Bids are asked until Nov. 10, for the erection of the theater at Madison and Green Sts., for the Hyde & Behman Syndicate. It is to cover an area of 118 × 175 ft., to have two balconies, and of fireproof construction; to cost $300,000. Dodge & Morrison, 82 Wall St., New York, are Archs.

MILWAUKEE, WIS.—Plans have been prepared by Hood & Tullgren, Archs., 86 Michigan St., for an apartment building, to be erected at Milwaukee St. and Juneau Ave. by Walter Read and Thomas J. Neacy, at an estimated cost of $100,000.

MINNEAPOLIS, MINN.—It is now definitely settled that the Curtis Hotel Co. will erect an $800,000 10-story fireproof hotel on the George A. Pillsbury estate, at Tenth St. and Third Ave., South. The hotel will be of fireproof construction throughout and will be of steel and concrete.

ST. PAUL, MINN.—JAMES LECK has been awarded the contract for erecting the woman's dormitory for Macalester College. Estimated cost, $75,000. Bell & Detweiler, 903 Northwest Bldg., Minneapolis, are Archs.

MINNEAPOLIS, MINN.—The T. F. Curtis Co. intend to build a new flat on the corner of Ninth St. and Mary Place, which will cost at least $100,000.

FORT LEAVENWORTH, KAN.—Bids are asked by Capt. Peter Murray, Q. M., until 11 a. m., Nov. 8, for constructing the following buildings, including plumbing and electric wiring: Two stables, one double stable guard building, eight double sets non-commissioned staff officers' quarters, one engineer workshop, two pontoon sheds.

ST. LOUIS, MO.—Sam & Lee Shubert, of New York, have secured options on three sites for erection of 8-story theater and hotel building, to cost $275,000; theater to have a seating capacity of 1,700. W. Albert Swasey, 705 Olive St., is Arch.

UNIVERSITY, N. DAK.—Bids are asked by the Board of Trustees of the State University, until Oct. 30, for a library building at the State University. J. W. Wilkerson is Secy.

SEATTLE, WASH.—The Trustee Co. will erect a 20-story building on Third Ave., between Columbia and Marion Sts., at a cost of not less than $1,750,000. C. R. Aldrich is Arch.

LOS ANGELES, CAL.—Plans have been prepared by A. L. Haley, Arch., for a 5-story brick apartment house, to be erected for Mrs. T. Jenkins at Seventh St. and Burlington Ave. Estimated cost, $90,000.

SAN FRANCISCO, CAL.—The Grand Lodge of Free and Accepted Masons will erect a new temple here.

Coxhead & Coxhead, Archs., have completed plans for a 5-story Class B building on Ellis St., between Powell and Mason Sts.

Bids are asked by John L. Clem, Chief Q. M., Dept. of California, until 11 a. m., Nov. 5, for erecting a laundry building at the U. S. Army General Hospital, Presidio of San Francisco, Cal.

MONTREAL, QUE.—The Quebec Government will erect a new jail in Montreal at a cost of about $1,000,000.

The Canadian Express Co. has been granted a permit to construct a 10-story office building at the corner of Youville Square and St. Paul St. The new structure is to cost $250,000. The front of the structure will be cut sandstone.

TORONTO, ONT.—It is understood that the plans for four new normal schools, under this year's educational programme, are ready for submission to the Ontario Cabinet for approval. As soon as this is obtained bids will be called for and work on the schools will be commenced. Before January it is hoped to have work on the whole four well under way. The schools are to be located at Hamilton, Stratford, Peterboro and North Bay.

OTTAWA, ONT.—DORAN & DEVLIN have been awarded the contract for the erection of the addition to the Supreme Court building.

HAMILTON, ONT.—Bids are asked until Oct. 26, by Fred Celerias, Secy. Pub. Wks., Ottawa, Ont., for additions and alterations to the post-office here.

CALGARY, ALTA.—A 6-story brick and stone hotel of fireproof construction is to be erected here, at a cost of $500,000, by the Calgary Hotel Co.

WATER SUPPLY—IRRIGATION.

The names of parties awarded contracts are printed in capital letters.

BOSTON, MASS.—Bids are asked until 2.30 p. m., Nov. 12, by the Charles River Basin Commission, for installing boiler plant, consisting of two boilers with appurtenances. Hiram A. Miller is Ch. Engr.; William S. Youngman is Secy. (Advertised, Engineering News.)

NEW YORK, N. Y.—Bids are asked until 3 p. m., Nov. 1, by the Park Board, for laying c.-i. water pipe in Harlem River Driveway, between 175th and Dyckman Sts. Moses Herrman is Pres.

NEW YORK, N. Y.—Bids are asked until 2 p. m., Nov. 7, by John H. O'Brien, Commissioner of Water Supply, Gas and Electricity, for laying water mains in various streets in the Boroughs of Manhattan, the Bronx, and Richmond, and for furnishing hydrants.

ALBANY, N. Y.—The Board of Contract and Supply has awarded to CASSIDY & GALLEGHER, Albany, contract for improvement of water supply and construction of engine foundations at Quackenbush St. pumping station. Contract price is $14,236. Isidore Wachsman is Clk. of Bd.; Walter E. Melius is City Engr.

HOLLAND PATENT, N. Y.—The Trustees of the Village of Holland Patent have awarded the contract for a system of waterworks to JOHN SIEGRIST, of Utica, the contract to be completed this fall, if possible. The price to be paid for the labor and material is $13,022.

MANASSAS, VA.—It is reported that only one bid was received on Oct. 10 for constructing water works, that of Thomas & Co., of Harrisburg, Va., and the same was rejected. New bids will be asked. O. E. Newman is Chn. Constr. Com.

NORFOLK, VA.—J. W. DAVIS, of Newport News, Va., has contract at $17,246 for the construction of the reinforced concrete reservoir on the exposition grounds for the Jamestown Exposition Co. Capacity, 2,000,000 gallons.

BILOXI, MISS.—This city will issue $25,000 additional bonds for the extension of water-works. O. G. Swetman is City Clk.

BRANDON, MISS.—It is reported that Kirkpatrick & Johnson, of Jackson, are preparing preliminary plans for proposed water-works and electric light systems. Estimated cost, $25,000.

BROOKHAVEN, MISS.—This city has let contract to the NEW ORLEANS ENGINEERING CO., New Orleans, La., to install a new outfit of machinery in water and light plant, doubling the present capacity.

OPELOUSAS, LA.—Bids are asked until Nov. 6, for boring an artesian well at the power-house. B. A. Littell is Mayor.

MADISONVILLE (Cincinnati post-office), OHIO.—The Village Council is preparing to expend $22,000 for extending water mains and improving electric lighting plant.

LIMA, OHIO.—The bids received Oct. 10, for installing new battery of pumps at the city pumping range from $2,413 to $10,750, and were prices on various kinds of pumps.

DETROIT, MICH.—The Water Commissioners are reported to have been authorized to lay new pipe lines at a cost of about $43,485.

JEFFERSON, OHIO.—Plans for proposed water-works system for Jefferson have been submitted to the State Board of Health. The plans call for an expenditure of about $37,000.

BLOOMINGTON, ILL.—Bids are asked until Nov. 2 by the Board of Local Improvement for furnishing and laying 8,716 lin. ft. c.-i. water pipe, including the necessary specials, valves, hydrants, ... Elmer Folsom is City Engr.

MARSHFIELD, WIS.—See under Light and Power.

WELLINGTON, KAN.—We are officially advised that at a special election held Oct. 9, the citizens voted $30,... for improvements to the municipal water-works and electric lighting systems. O. T. ...e is Engr.

LANDER, WYO.—Bids are asked until 8 p. m., Nov. 6, by the Town ..., for construction of complete water-works and sewer systems, to cost about $50,000 and $25,000 respectively. (Advertised, Engineering News.)

CLARENDON, ARK.—It is reported that the organization of company to install water-works and sewerage systems is being considered. Estimated cost, $....

HOBART, OKLA.—J. W. ...EGAR, of Rich Hill, Mo., has been granted contract for construction of a system of water-works in Hobart, the contract price being $23,370.

ADA, IND. T.—The city has voted affirmatively a $40,000 bond issue for construction of water-works. J. P. Wood is Mayor.

ATOKA, IND. T.—It is reported that the O'NEIL ENGINEERING CO., of Dallas, Tex., has secured the contract for constructing water-works. W. Bassett is Mayor.

WALLA WALLA, WASH.—Bids are asked at the Water Office, until Oct. 31, for furnishing the water department with stop covers and service clamps. R. F. McLean is Registrar.

NORTH YAKIMA, WASH.—An ordinance granting a franchise to Jesse H. Rose and associates, to erect and maintain for 50 yrs. a system of water-works is before the City Council.

OAKLAND, CAL.—Articles of incorporation have been filed by the California-Nevada Canal, Water & Power Co., formed for the purpose of conducting irrigation projects. The capital stock is $2,000,000, of which $500 has been subscribed. The incorporators are Leo H. Susman, Joseph Haber, Jr., and Walter J. McLean, of San Francisco; Charles Elsey, of Oakland, and Joseph C. Love, of Berkeley.

PRESTON, ONT.—Bids are asked until 6 p. m., Nov. 5, by C. R. Hanning, Town Clk., for supplying pumping machinery for the Preston water-works. Davis & Johnston, Berlin, Ont., are Engrs.

GUELPH, ONT.—The WALKERVILLE BRIDGE CO. has contract, at $5,000, to construct stand-pipe for the Ontario Agricultural College at Guelph.

PARRY SOUND, ONT.—The ratepayers of Parry Sound have voted favorably on a by-law to raise $10,000 for water-works extension.

SEWERAGE.

The names of parties awarded contracts are printed in capital letters.

BOSTON, MASS.—Bids are asked until 2.30 p. m., Nov. 9, by the Metropolitan Water and Sewerage Board, for constructing, in rock and earth tunnel, Section 85 of the extension of the high-level sewer, South Metropolitan system, in Brighton. The sewer will be 6,350 ft. long with an inside diameter of 69 × 72 ins. William M. Brown is Engr. Sewerage Works; William N. Devenport is Secy.

PROVIDENCE, R. I.—It is reported that sewers will be constructed here at the cost of $100,000. Otis F. Clapp is City Engr.

CROTON ON-HUDSON, N. Y.—We are officially advised that J. B. Newhall and P. G. Watmough, Jr., Hydraulic and Electric Engrs., 1 Broadway, New York, have been engaged by the Colabaugh Water Co. to design and supervise the installation of a system of water-works at Croton-on-Hudson.

NEW YORK, N. Y.—Bids are asked until 11 a. m., Oct. 31, by Bird S. Coler, Pres. Boro. of Brooklyn, for constructing sewer in 14th St., from 65th to 75th Sts.

Bids are asked until 3 p. m., Oct. 31, for reconstructing sewer outlet at 23d St., North River; also for constructing sewer in West 139th St., between Riverside Drive and Broadway.

NEW YORK, N. Y.—Bids were received Oct. 16, by Louis F. Haffen, Pres. Boro. of the Bronx, for constructing sewers in (a) East 139th St., between Walnut and Cypress Aves.; (b) Westchester Ave., between Whitlock Ave. and West Farms Road; (c) East 165th St., Grand Boulevard and Concourse, two sections; (d) rebuilding an additional portion of sewer in East 149th St., near New York, New Haven & Hartford R. R. crossing; (e) constructing sewers in East 182d St., between Arthur and Belmont Aves.; (f) constructing receiving basins and appurtenances in various locations; (g) constructing sewers in East 170th St., between Wythe Pl. and Grand Boulevard and Concourse, and in Grand Boulevard and Concourse (four sections); (h) constructing sewers in Crotona, between East 189th and the Southern Boulevard; (i) constructing receiving basins at the junction of Jerome and Sedgwick Aves.; (j) constructing in Summit Pl., between Heath and Boston Aves.; (k) constructing sewers in East 140th St., between Walnut and Cypress Aves.; (l) constructing sewers in Burnside Ave., between Preston Ave. and Grand Boulevard and Concourse, and in Grand Boulevard, between Mount Hope Pl. and East 18..th St. The bids were as follows: Culgin-Pace Contracting Co., 787 Tremont Ave., (a) $17,686, (h) $8,602, (k) $20,369; Briggs & McLaughlin, 19 East 130th St., (a) $17,889, (k) $18,080; Burns & Rodgers, 1929 Amsterdam Ave., (a)

$20,785, (h) $9,095, (k) $20,255; James Pilkington, Fort Washington Park, (d) $21,318; F. V. Smith Construction Co., 147 East 125th St., (d) $23,318, (h) $8,037, (k) $21,744; Frank Del Balso, 1481 Hoe Ave., (e) (lowest bidder) $4,83_, (h) $8,290; Thomas Murray, 1871 Jerome Ave., (f) (lowest bidder) $4,161; Hannan Construction Co., 10 Arthur Ave., (h) $7,122, (i) (lowest bidder) $4,168; J. S. Rogers, 198th St. and Briggs Ave., $7,344; D. D. Leahy, 1446 Prospect Ave., $8,188; Haeduven & Schloss Construction Co., 700 Tremont Ave., $8,842.

The bids for (b), (c) and (l) were withdrawn.

When the lowest bid on any work is below $5,000, no others are given.

AMSTERDAM, N. Y.—We are officially informed that DeNallo & Klingbery submitted the lowest bid, at $9,619, on Oct. 17, for construction of sewers in Amsterdam. This being in excess of the engineer's estimate, which was $8,100, all bids were rejected.

BUFFALO, N. Y.—MILLER & FRANKLIN, 805 Ellicott St., were low bidders, at $24,906, for constructing sewer in Buffalo. Francis G. Ward is Comr. Pub. Wks.

Bids are asked until 11 a. m., Oct. 31, by the Department of Public Works, for constructing an 18, 15 and 12-in. tile sewer in Wiley Pl., between Skillen St. and Kenmore Ave., and a 12-in sewer in Trenton Ave., between Georgia and Carolina Sts.

ELMIRA, N. Y.—The City Council has decided to construct sewers on South Main, Mount Zoar, West 4th and Washington Sts. as soon as suitable arrangements have been made. Frederick Leach is City Engr.

MERCHANTVILLE, N. J.—Bids are asked until 3 p. m., Nov. 10, by the Council of the Borough of Merchantville, at the Council Chamber, for constructing a sanitary sewer system and sewage disposal plant in Merchantville. A. W. MacCallum is Ch. Sewerage Com.; City-Wastes Disposal Co., 156 5th Ave., New York, N. Y., are Engrs. (Advertised, Engineering News.)

LEBANON, PA.—It is reported that a $127,000 sewer system is to be constructed in Lebanon. Thomas R. Crowell is City Engr.; James H. Fuertes, 140 Nassau St., New York, N. Y., is Consult. Engr.

DARBY, PA.—At a special meeting of Darby Borough Council, held recently, WOLFENDEN BROS. were awarded contract for laying sewer on Summit St., between Tenth and Eleventh Sts.

BALTIMORE, MD.—Bids are asked until 11 a. m., Nov. 7, by the Board of Awards of Baltimore City, at the office of Harry F. Hooper, City Register, for constructing outfall sewer, Sections 1 and 2. Peter Leary, Jr., is Chn.; Harry W. Rodgers is Secy. (Advertised, Engineering News.)

WASHINGTON, D. C.—Bids were received Oct. 18, at the office of the Commissioners of the District of Columbia, for the construction of sewers. Bids were as follows: (a) John F. Tolbert, Washington, D. C.; (b) E. G. Gummell, Eckington, D. C. Ordinary excavation, per cu. yd., (a) $1.82, (b) $1.25; sewer brick masonry, (a) $25, (b) $23; rock excavation, (a) $4, (b) $3; concrete masonry "D", (a) $12, (b) $8.78; embankments, (a) $1.82, (b) 75 cts.; 24-in. pipe, (a) $1.82, (b) $1.75.

WASHINGTON, D. C.—CARTRIGHT & DAVIS, of Fredericksburg, Va., have contract, at $20,000, for sewer work in Washington.

MORGANTOWN, W. VA.—The city is considering expending $15,000 in constructing sewerage system, and $35,000 in street improvements. John L. Hatfield is Mayor.

FAYETTEVILLE, N. C.—We are officially advised that ABEC & EDWARDS, of Hickory, N. C., for constructing sewers of 8 to 20-in. pipe. W. N. Tillinghast is Clk.

MOBILE, ALA.—Bids are asked until Nov. 8, by the Board of Public Works, for constructing storm sewers, and for paving with bitulithic and wood block pavements.

GREENVILLE, ALA.—Bids are asked until Nov. 5, by Thomas W. Peagler, the City Clk., for constructing 4 miles of pipe sewers.

CINCINNATI, OHIO.—Bids are asked until noon, Nov. 12, by the Board of Public Service, for constructing sewers of from 12 to 21 ins. in diameter in Symmes St., Cincinnati. Estimated cost, $9,155. M. J. Keefe is Clk. of Bd.; C. D. Dannenhower is City Engr.

AKRON, OHIO.—HUNT & WIGLEY, on Oct. 10, secured contract, at $15,907, for constructing storm and sanitary sewers in Hickory, Maple, Silver, Nickle, Gold and Valley Sts.

MOUNT HEALTHY, OHIO. — Bids are asked until Nov. 2, by the Board of County Commissioners, W. H. Blair, Pres., at Cincinnati, for concrete box culvert on Compton Road, Mount Healthy, Springfield Township.

CHILLICOTHE, OHIO.—Contract for constructing the Henry Creek reinforced concrete sewer has been let to JARDINE, BREWER & TOMLINSON. Harry T. Hermann is Cl.k Bd. Pub. Service.

BEACH CITY, OHIO.—Bids are asked by A. B. Wingate, Village Clk., until 7 p. m., Oct. 26, for the construction of a sewer on Fair St., and a lateral sewer from Fair to Ray Sts., 1,200 ft., more or less, to be laid with 18 and 24-in. pipe.

CLEVELAND, OHIO.—The Board of Public Service, on Oct. 12, passed a resolution providing for a new sewer to take the overflow water on West 117th St. The sewer is to divert the overflow water into the lake. The cost of the work will be in the neighborhood of $24,000. W. J. Carter is City Engr.

Bids are asked until noon, Nov. 13, by the Board of Public Service, for constructing portions of main intersecting sewer in Lakeside Ave., N. E., between East 40th and East 33d Sts., and between East 33d and East 28th Sts. A. R. Callow is Secy. Bd. Pub. Service. (Advertised, Engineering News.)

INDIANAPOLIS, IND.—See under Streets and Roads.

BROOKVILLE, IND.—Bids are asked by the Commissioners of Franklin County, until Nov. 5, for the construction of a sewer from the county jail to the main sewer. Charles A. Miller is County Audr.

EVANSVILLE, IND.—The Board of Public Works has awarded contracts for the construction of two sewers to NEWMAN & VINYARD and to JAMES MEGUAR.

GARY, IND.—J. H. GREEN & SON, of Appleton, Wis., are reported to have secured contract for constructing sewers at Gary, at $137,000.

TERRE HAUTE, IND.—Bids are asked until 4 p. m., Oct. 29, by the Board of Public Works, for constructing pipe sewer in 16th St., from Eighth Ave. to Locust St.

SUNMAN, IND.—PULSE & PORTER, of Greensburg, Ind., have been awarded contract to construct a sewer system at Sunman. The contract price is between $5,000 and $6,000.

ESCANABA, MICH.—Bids are asked until Nov. 6, for constructing pipe sewers in Escanaba. T. J. Burke is City Clk.; D. A. Broutherton is City Engr.

CADILLAC, MICH.—A sewage disposal plant will be constructed here at the cost of from $15,000 to $35,000.

GRAND HAVEN, MICH.—Bids are asked until 2 p. m., Nov. 7, by the City Council, for constructing about 12 miles of sewers, ranging from 8 to 60 ins. in diameter. All sewers having a diameter greater than 27 ins. are to be constructed of brick or concrete, and those having smaller diameter to be vitrified pipe. The Riggs & Sherman Co., The Nasby, Toledo, Ohio, are Engrs.; Lewis A. Gorham is City Clk. (Advertised, Engineering News.)

DECATUR, ILL.—Bids are asked until 2 p. m., Nov. 3, by the Board of Local Improvements, for constructing the proposed East Prairie Ave. sewer system. We are officially advised that there will be 3,148 ft. of 48-in. and 1,470 ft. of 42-in. concrete sewer, also about six miles of lateral sewers requiring pipe ranging from 8 to 24 ins. Estimated cost, $37,409. A. B. Alexander is City Engr.

WALES, WIS.—C. J. CRILLEY, of Milwaukee, is reported to have secured contract for constructing sewers and a sewage disposal plant at the State Sanatorium at Wales at about $8,600.

LA CROSSE, WIS.—A main sewer will be constructed at La Crosse, to cost about $150,000.

DES MOINES, IA.—The following bids were received on Oct. 11, by the Board of Public Works, for constructing the Grand View sewer system: Cook Construction Co., Des Moines, $81,860; J. W. Turner, Des Moines, $84,578; O. P. HERRICK, Des Moines, $77,615 (awarded contract); Jas. Horrabin, Des Moines, $89,333; King-Lambert Co., Des Moines, $87,975.

HALLOCK, MINN.—JAMES KENNEDY, of Fargo, N. Dak., is reported to have secured contract for constructing a sewerage system at about $10,000.

VIRGINIA, MINN.—Bids are asked until Nov. 6, by the City Council, for constructing sewer in District No. 3 F.

RAPID CITY, S. DAK.—Contract for constructing system of sanitary sewers has been awarded to McCONNELL & SAMPSON, Sioux Falls, S. Dak., at $28,980. A. K. Thomas is City Audr.; M. Tschirgi is Engr., Dubuque, Iowa.

CANTON, S. DAK.—Bids are asked until Nov. 5 for constructing sewer on Third St.

LANDER, WYO.—See under Water Supply and Irrigation.

VAN BUREN, ARK.—It is reported that Theodore Hartman has been selected to construct the proposed sewer system at Van Buren, which, it is estimated, will cost $20,000.

CENTRAL CITY, COLO.—JORDAN & CO. have been awarded the contract to construct a sewerage system in the northwestern part of the city. The sewer main will cover ten blocks.

DALLAS, TEX.—A sanitary sewer will be constructed from the Fair grounds to Trinity River, to cost about $25,000.

SULPHUR, IND. T.—The city contemplates putting in a sewer system at a cost of $15,000.

LOS ANGELES, CAL.—B. F. FORD has the contract for constructing sewers in an extensive district in the southwestern part of the city, and including Santa Barbara, Santa Monica and Western Aves. and Normandie St. The work is to be completed within five months.

BROMPTON, ONT.—The Council is considering the question of installing a sewage disposal system, to cost about $32,000.

TORONTO, ONT.—The GODSON CONSTRUCTION CO. has secured the contract for constructing sewers, at $9,580. Bids were opened Oct. 2.

HAMILTON, ONT.—Improvements are being planned for improving the mountain drain, at a cost of $13,000.

RED DEER, ALTA.—The ratepayers of Red Deer, Alta, have voted favorably on a by-law to raise $30,000 for construction of a sewer system.

STREETS AND ROADS.

The names of parties awarded contracts are printed in capital letters.

GREENLAND, N. H.—We are officially advised that PERRIN W. NICHOLS, Kingston, N. H., has been awarded contract to construct State roads in Greenland. A. W. Dean, Concord, is State Engr.

HAMDEN, CONN.—Bids are asked until Oct. 26, by the Board of Selectmen, for the care and repair of the roads and bridges in this town for a period of eleven months from Nov. 1, 1907.

COLEBROOK, CONN.—Bids are asked until 3 p. m., Oct. 27, by the Board of Selectmen, for grading a section of road in Colebrook.

NEW YORK, N. Y.—Bids are asked until 3 p. m., Oct. 30, by John W. Brannan, Pres. Bd. of Trustees of Bellevue and Allied Hospitals Dept., for excavation, steel and iron, grading roads and walks, sodding and seeding, subsoil and drainage, and all other work connected with completion of the property about the new Fordham Hospital Bldgs., Boro. of the Bronx.

Bids are asked until 2 p. m., Nov. 1, by James W. Stevenson, Comr. of Bridges, for regulating and grading with granite blocks, the southeasterly side of 145th St. bridge, Harlem River.

NEW YORK, N. Y.—Bids were received Oct. 16, by Louis F. Haffen, Pres. Boro. of the Bronx, for (a) furnishing engineering instruments and supplies to the Topographical Bureau; (b) paving with asphalt blocks on concrete foundation the roadway of East 156th St., from Beck St. to Southern Boulevard; (c) regulating, grading, setting curbstones, flagging sidewalks, laying crosswalks, building approaches and placing fences in Nelson Ave., from Boston Ave. to Featherbed Lane; (d) same on East 174th St., from Topping Ave. to the New York, New Haven & Hartford R. R., and building steps thereon between Anthony and Clay Aves.; (e) same on Kingsbridge Terrace, from Kingsbridge Road to Boston Ave.; (f) same on Grand Ave., from Fordham Road to St. James St.; (g) same on Loring Pl., from Burnside Ave. to West 180th St.; (h) same on East 174th St., from Southern Boulevard to the Bronx River; (i) repaving with asphalt, the roadway of East 142d St., from Brook to St. Ann's Aves.

The bids were as follows: George Oertel, (a) (lowest bid) $4,291; Asphalt Construction Co., 207 Broadway, (b) (lowest bid) $4,544; D. W. Moran, 563 Burnside Ave., (c) $16,244, (e) $19,860, (f) $5,839, (h) $11,771; P. Reddy, 111th St. and Lenox Ave., (c) $16,631, (h) $12,837; P. J. Kane, 933 East 150th St., (c) $17,569, (e) $22,903, (f) $5,512; T. V. Smith Construction Co., 147 East 125th St., (c) $17,645, (e) $22,472, (h) $12,026; J. J. Hart Co., 173d St. and Broadway, (c) $20,541; George I. Bailey, 1199 Fulton Ave., (c) $20,799, (e) $24,975, (f) $6,487; W. T. Murray, 1155 Boston Road, (c) $23,474, (f) $6,750, (h) $11,265; Thomas Crimmins Construction Co., 444 East 69th St., (c) informal, (d) $12,317, (e) $23,341; Frank Del Balso, 1481 Hoe Ave., (e) $20,260, (f) $5,732, (g) (lowest bid) $4,924, (h) $9,378; John B. Malatesta, 3169 Jerome Ave., (d) $11,967; Haeduven-Schloss Construction Co., 700 Tremont Ave., (d) $12,838; J. Haggerty, (d) $13,465; Bellno & Merritt, Tuckahoe, N. Y., (e) $20,720; J. C. Voorhees, 182d St. and Morris Ave., $20,991; C. N. Whitten, 215 West 125th St., (e) $22,888; George L. Brown, 613 West 146th St., (e) $23,110; C. W. Collins, Fordham Road, (e) informal; Uvalde Asphalt Co., 1 Broadway, (f) $5,809; M. Garvey, (f) $6,560; P. Maher, 206 East 172d St., (f) $5,882; McCabe Holland Co., 145th St. and Southern Boulevard, (e) $5,990, (h) $12,526; J. Schmidt, (h) $11,222; Troy Public Works Co., 1148 St. Nicholas Ave., (h) $11,239; A. Mancine, Williamsbridge, (h) $11,847; M. O'Connell, Jr., 179th St. and Amsterdam Ave., (h) $12,104; Milligan Construction Co., (h) $13,078; D. D. Leahy, 1446 Prospect Ave., (h) $13,260; Asphalt Construction Co., 307 Broadway, (i) (lowest bidder) $3,155.

When the lowest bid on any work is below $5,000, no others are given.

NEW YORK, N. Y.—Bids are asked until 11 a. m., Nov. 2, by Joseph Bermel, Pres. Boro. of Queens, for repaving with wood block pavement on concrete foundation, the roadway of Church St., from Metropolitan Ave. to north side of Hillside Ave., Fourth Ward; also roadway of Third Ave., from First to 13th St., Fourth Ward; also roadway of First Ave., from Ferry to 13th St., Third Ward; also roadway of Seventh Ave., from Broadway to Graham Ave., First Ward.

Bids are asked until 3 p. m., Nov. 8, by the Park Board, for furnishing and delivering Hudson River road gravel for parks and parkways in the Borough of Brooklyn.

TROY, N. Y.—Bids are asked until Nov. 9, by the Board of Contract and Supply, for regulating, grading, curbing and paving a portion of Pawling Ave., requiring 3,800 lin. ft. granite curbing, 4,700 sq. yds. vitrified brick on a 6-in. concrete foundation, and 4,000 sq. yds. vitrified brick on a 9-in. concrete foundation. James M. Riley is Clk.

BUFFALO, N. Y.—The following are the lowest bids received Oct. 19, for street paving: Urban St., Fillmore Ave. to Moselle St., with asphalt on concrete base, H. P. Burgard, 438 Prudential Bldg., Buffalo, $31,000; Mystic St., from Hopkins to Germania Sts., asphalt, German Rock, Asphalt & Cement Co., 306 P. S. Morgan Bldg., $12,940; Beacon St., from Hopkins to Germania Sts., asphalt, H. P. Burgard, $13,000. Francis G. Ward is Comr. Dept. Pub. Wks.

CAMDEN, N. J.—Bids for macadamizing 3¼ miles of public road from Haddonfield to Coffins Corner received by Board of Freeholders on Oct. 10. The bids were as follows: John F. Shanley, $34,871; Le Cato Construction Co., $33,225; EDWIN C. HUMPHREYS, $32,610 (awarded contract); R. V. Schellinger, $34,500.

JERSEY CITY, N. J.—Bids are asked until 4 p. m., Nov. 1, by the Board of Chosen Freeholders of Hudson County, at Jersey City, for improving the Paterson plank road, by constructing sidewalks and drain, and repairing sewer defects. John P. Egan is County Clk.

CAPE MAY, N. J.—We are officially informed that on Oct. 6, W. S. SHAW, Cape May, secured contract to construct 7½ miles of streets. Edmund K. Brown is Res. Engr.

CHARLEROI, PA.—It is reported that the CHARLEROI PAVING & CONSTRUCTION CO. has secured contract for paving portions of Second, Seventh, Eighth and Ninth Sts. and Cherry and Peach Alleys, at $9,815.

WEST FAIRVIEW, PA.—The State Highway Commissioner has awarded contract to MALONE & SHERMAN, of Lancaster, Pa., for constructing one mile of road between Wormleysburg and West Fairview.

KINGSTON (Wilkes-Barre post-office), PA.—B. G. COON & CO., of Kingston, have been awarded the contract for the construction of a road in Kingston Township, at $10,000.

WILLIAMSBURG, VA.—A movement is on foot to construct a macadam road from Williamsburg to Jamestown Island. It is estimated that the road, as planned, will cost $40,000.

McMECHEN, W. VA. — HIGGINS & HIRST, of Moundsville, W. Va., have been awarded contract for paving McMechen Ave. with brick.

MORGANTOWN, W. VA.—See under Sewers.

WINSTON SALEM, N. C.—The city is considering the expenditure of $200,000 for street improvements, and a committee has been appointed to make investigations.

COLUMBIA, S. C.—It is reported that this city will expend about $50,000 for street improvements shortly.

THOMASVILLE, GA.—Plans are being made by the City Council for paving the streets of Thomasville. Bonds to the amount of $90,000 have been authorized by a municipal election, and these will be sold as soon as they can be placed to advantage. It is not definitely decided yet whether the paving will be of bitulithic or vitrified brick.

TAMPA, FLA.—R. L. DAVIS has contract, at $1.45 a sq. yd., for paving East Lafayette St. and Maryland Ave. with vitirfied brick. H. H. SCARLETT has contract, at 23½ cts. a cu. yd., for grading. R. F. Bettis is County Engr.

BIRMINGHAM, ALA.—It is reported that the City Council, on Oct. 3, awarded contract for street improvements as follows: grading, macadamizing, curbing and gutter paving, to MOORE-EVANS CONSTRUCTION CO. and R. BLACKBURN, 219 South 21st St., at $15,903; grading, curbing and gutter paving, to the SOUTHERN CONSTRUCTION CO., at $4,553; grading, macadamizing and gutters, to C. M. BURKHALTER, at $2,712, and for sidewalk paving, to R. BLACKBURN, 219 South 21st St., at $5,133.

MOBILE, ALA.—See under Sewers.

VICKSBURG, MISS.—Contract has been awarded to the SOUTHERN PAVING CO., at $2.25 a sq. yd., for paving China St. with brick.

A petition to pave Clay St., from Washington to Sherry Sts., has been submitted to the City Council, and will be acted upon immediately. H. J. Trowbridge is City Clk.

ALEXANDRIA, LA.—Bids are asked until 7.30 p. m., Nov. 6, by the City Council, for constructing sidewalks on various streets. E. F. Hunter is City. Clk.

CHATTANOOGA, TENN. — SOUTHERN PAVING & CONSTRUCTION CO. has contract, at $1.65 a sq. yd., for resurfacing with asphalt a portion of McCallie Ave. Total cost, $11,781. Robert Hooke is City Engr.

CINCINNATI, OHIO.—Bids are asked until noon, Nov. 12, by the Board of Public Service, for paving 11,400 sq. yds. with bitulithic pavement, and 2,250 sq. yds. with brick, on Fairview Ave., at an estimated cost of $35,527.

Bids are asked until the same time for work on Clifton Ave., as follows: granite blocks, 17,750 sq. yds.; grading, 12,600 cu. yds.; concrete, 2,960 cu. yds.; granite curb, 8,250 lin. ft. Estimated cost, $91,987. M. J. Keefe is Clk. Bd.; Charles N. Danenhower is City Engr.

BRAZIL, IND.—Bids are asked by the County Commissioners, until 11.30 a. m., Nov. 12, for the improvement of highways in Perry Township.

PETERSBURG, IND.—Bids are asked by the Commissioners of Pike County until 3 p. m., Nov. 5, for construction of various gravel roads in Logan Township.

BEDFORD, IND.—Bids are asked until Nov. 7, for constructing five gravel or macadam roads in Marion Township, 39,098 ft., and five roads in Spice Valley Township, 22,308 ft. Aslem Wood is Chn. Co. Comrs.; Walter G. Owens is County Audr.

INDIANAPOLIS, IND.—The Board of Public Works has taken final action, and will ask for bids shortly for the following contracts: For brick roadway in alley east of New Jersey St., from 16th to 21st Sts.; asphalt roadway in 23d St., from Meridian to Central Aves.; gravel roadway in alley east of Windsor St., from Commerce to 12th Sts.; brick roadway in alley south of 13th St., from Ashland to College Aves.; brick gutters and curb in Douglass St., from New York to Michigan Sts.; for bitulithic pavement in 18th St., from Senate to Talbot Aves., and 23d St., from Capital Ave. to Illinois St.; for a sewer in Walnut St., from Agnes to Charlotte Sts.; a sewer in Pennsylvania St., from Fall Creek to 34th St.

EVANSVILLE, IND.—Bids are asked until Oct. 31, by the Board of Public Works, for paving various streets and alleys. W. F. Wunderlick is Clk.

CARROLLTON, ILL.—Bids are asked until 2 p. m., Oct. 29, for constructing 10,430 sq. yds. brick pavements, at an estimated cost of $19,279. Charles W. Brown, Jacksonville, Ill., is Engr.

EVANSTON, ILL.—SMITH & BROWN are reported to have secured the contract for paving with granite top macadam West Railroad Ave., and Livingston and Jenks Sts., at $13,331.

CANTON, ILL.—The contract for the improvement of Avenue D with brick pavement has been awarded to HECKARD & SONS, at $11,352, and SAVILL & CARNEY have been awarded the contracts for North Second and Martin Aves., at $4,678.

VANDALIA, ILL.—FOULKES-FORBES CO., of Muncie, Ind., are reported to have secured the contract for paving portions of Fourth, Fifth and Sixth Sts., at $10,300.

EAST ST. LOUIS, ILL.—We are officially advised that the HILL-GAYNORD CONSTRUCTION CO., East St. Louis, has contract to pave 22d St. with brick ,at $16,127. Other bids received at same time, Oct. 13, were: Walter Coonan, East St. Louis, $16,-523, and M. J. Kelley, East St. Louis, $16,-657. E. J. Eggmann is City Comptroller. W. J. Crocken is City Engr.

RED OAK, IOWA.—The contract for paving portions of Fifth and Sixth Sts., bids opened Oct. 9, has been awarded to DAVIS & BRYAN CO., of Red Oak, at $11,987. C. M. Kelley is City Clk.

OTTUMWA, IOWA.—Bids are asked until Nov. 5 by W. H. O'Malley, Chn. St. Com., for paving with vitrified brick on a 6-in. concrete foundation on a portion of Fourth St. C. R. Allen is City Engr.

ST. PAUL, MINN.—The Board of Public Works has awarded to the GENERAL CONTRACTING CO., at $5,713, contract to macadamize University Ave., from Fairview to Prior St.

GRAND FORKS, N. DAK.—J. J. Smith, City Engr., referring to city paving, advises us that "this city will repave 60,000 yds. in the business section during 1907. Some unpaved streets will be paved during 1907 or 1908. Material to be used is not yet determined."

HELENA, MONT.—It is reported that bids received for macadamizing Helena Ave. were: Louis Johnson, $11,970; Adams Bros. & Lind, $12,729; George M. Savage & Co., $13,985.

WEBB CITY, MO.—Bids are asked until Nov. 5 for cement sidewalks, macadam, brick walk, brick paving and curb and gutter of cement and stone. W. E. Smith is City Engr.

KANSAS CITY, MO.—The City Council is reported to have passed an ordinance providing for construction of a driveway to connect Kersey Coates Terrace and Penn Valley. The road to be 100 ft. wide and cost about $175,000.

ST. LOUIS, MO.—Willard E. Winner, of Kansas City, Mo., has completed plans for a boulevard to be constructed along the River des Peres, from Broadway to the Gravoir Road. The purpose of the boulevard will be to straighten the river and to construct an electric railway over the route.

HOUSTON, TEX.—W. S. HIPP has contract for 3¼ miles of gravel work on the Crosby and Lynchburg road.

ENID, OKLA.—The Mayor has signed a contract with the WARNER-QUINLAN ASPHALT CO., of Syracuse, N. Y., for street Paving.

SPOKANE, WASH.—The city has awarded a number of contracts for street improvements, amounting to about $31,000 in all. The largest contract was awarded to H. L. LILIENTHAL, at $7,045, for grading, curbing and parking Olive Ave., from Olive Ave. bridge to Lee St.

PORT TOWNSEND, WASH.—Bids are asked until 11 a. m., Nov. 10, by Charles A. Clark, Q. M., for constructing roads, gutters and catch-basins at Fort Worden.

COBURG, ONT.—It is reported that 10,000 ft. of cement sidewalks will be constructed in this city.

MANUFACTURING PLANTS.

The names of parties awarded contracts are printed in capital letters.

EAST HAMPTON, MASS.—The West Baylston Mfg. Co. will erect a 2-story mill, 325 × 120 ft., with a 1-story extension 50 × 120 ft. F. P. Sheldon & Co., Providence, R. I., are Engrs.

SPRINGFIELD, MASS.—Plans are being prepared by E. C. & G. C. Gardner, Archs., 33 Lyman St., for new car barns and shops, to be erected at Main and Carew Sts., by the Springfield Street R. R. Co. Estimated cost, $100,000. H. C. Page is Gen. Mgr.

A 4-story addition, 50 × 100 ft., will be constructed to the plant of the Knox Automobile Co.

CENTRAL VILLAGE, CONN.—CONTURE & FRANKLIN, Moosup, Conn., have been awarded the contract for erecting the new plant for the Central Worsted Co.

NEW YORK, N. Y.—The Citizens' Independent Ice Co., with a capital of $300,000, will erect an artificial ice plant at 76-84 Ninth St., Brooklyn, at an estimated cost of $250,000. The plant will have a daily capacity of 200 tons. James F. Meehan, 5011 Sixth Ave., Brooklyn, is Pres.

NEW YORK, N. Y.—The G. Siegle Co., 79 Duane St., will erect a group of factory buildings at Bachman Station, Staten Island, at a cost of $500,000. William L. Stoddard, 31 Union Sq., is Arch.

Plans have been prepared by F. W. Wentworth, Arch., Citizens' Trust Co. Bldg., Paterson, N. J., for a factory building, 75 × 100 ft., to be erected at 542-46 West 36th St., for Thonet Bros., 860 Broadway, for the manufacture of Vienna bentwood furniture. Estimated cost, $100,000.

NIAGARA FALLS, N. Y.—It is reported that the Niagara Electro Chemical Co. will erect a brick and steel addition, 60 × 208 ft., to its plant. Robert C. Fayfield is Arch., Ellicott Sq., Bldg., Buffalo, N. Y.

OSWEGO, N. Y.—J. A. CULKIN, of Oswego, has been awarded the contract for the masonry work on the 5-story addition to the plant of the Standard Spinning Co., and PETER RALEY, of Oswego, has been awarded the contract for the carpentry work. Lockwood, Greene & Co., of Boston, will install the apparatus.

JERSEY CITY, N. J.—F. B. GILBRETH, of New York, has been awarded a contract for a 60-ft., 2-story reinforced concrete building, to be used for manufacturing purposes, by the Stayman Mfg. Co., of Jersey City, N. J.

MILTON, PA.—The Milton Shoe Co. will have plans prepared for 2-story brick addition to its factory. Power equipment and special machinery will be required.

PHOENIXVILLE, PA.—W. B. Inman, of Stanwick, N. J., will erect a 2-story, brick planing and wood-working mill, 50 × 100 ft., at this place. Power plant and special machinery will be required.

PHILADELPHIA, PA.—Charles Balsterom, Arch., 411 Walnut St., has plans for a 10-story light manufacturing building at Juniper and Cherry Sts., for George F. Lasher.

Robert M. Greene & Son, 1413 Vine St., will have plans prepared for 5-story, brick addition to their factory at 1423-25 Vine St. Power equipment and special machinery will be required.

WILKES-BARRE, PA.—It is reported that the Wilkes-Barre & Wyoming Valley Traction Co. will spend $550,000 in improvements to its plant. Thomas A. Wright is Gen. Supt.

The erection of a plant for the manufacture of the Kelley-Arnold automatic air and steel coupler is being planned by the Kelley-Arnold Manufacturing Co., of Wilkes-Barre, Pa. C. F. Royer, Pres.; J. J. O'Donnell, Secy., and Philip Reilly, Treas.

WILLIAMSPORT, PA.—Bids are asked by the Demerest Mfg. Co. for the erection of a 2-story reinforced concrete factory building, to be erected here. Power equipment and special machinery will be required.

BALTIMORE, MD.—F. DECKER & SON, 1209 East Biddle St., have secured the contract for a 3-story brick factory for Rennons, Kleinle & Co. Cost, $7,000.

It is reported the Crown Cork & Seal Co., 1501-1523 Guilford Ave., will build an additional 4 or 5-story building to its plant. Estimated cost, $175,000. Charles M. Anderson, 324 North Charles St., is Arch.

Owens & Sisco, Continental Trust Bldg., have received bids for a 3-story reinforced concrete addition to a bakery for Rice Bros. & Co. It is to be 30 × 100 ft.

LYNCHBURG, VA.—Plans have been prepared and bids will be asked at once for building to be erected by the Lynchburg Shoe Co. It is to be a 7-story building, 140 × 200 ft.

MOORESVILLE, N. C.—The Eagle Clothing Mfg. Co. will erect a 2-story, 50 × 80, factory building here.

GAINESVILLE, FLA.—The Fruit Growers' Ice Co., of which W. R. Thomas is Pres., will erect a 30-ton absorption ice plant here.

BROOKHAVEN, MISS.—It is reported that J. B. Nalty, Pres. of the East Union Lumber & Mfg. Co., is completing arrangements for the installation of a 50-ton ice plant.

HENDERSON, KY.—A 150 × 150-ft. addition is to be erected at the George Delker Co. carriage factory.

NILES, OHIO.—Plans have been prepared by the Thomas Construction Co., Niles, Ohio, for an extensive steel plant, including two 50-ton open-hearth steel furnaces, soaking pits, continuous furnaces, gas producers.

WARREN, OHIO.—The Warren City Tank & Boiler Co. will erect an addition to its plant.

YOUNGSTOWN, OHIO.—A shirtwaist factory is to be established here by Grosse & Dallett, of Cleveland. About 100 girls and women will be employed at the start.

AKRON, IND.—The Akron Milling Co. has been incorporated to build and equip a mill and elevator. Estimated cost, $20,000. Jacob J. King, Harvey Long and Charles Smith are Directors.

HAMMOND, IND.—The Standard Steel Car Co., of Butler, Pa., will erect a $5,000,000 plant in this city. The company has purchased land here costing $250,000. J. M. Hansen, of New York, is Pres.

INDIANAPOLIS, IND.—The Eureka Refrigerator Co. is asking for bids for the erection of a manufacturing plant. In addition to main building, 300 × 72 ft., a warehouse, 92 × 72 ft., will be erected. Estimated cost, $40,000. Theodore Langbern, Baldwin Block, is Arch.

The National Veneer & Lumber Co., incorporated with a capital of $25,000, will establish a veneering plant here. Nathan F. Owings, W. G. Bass and A. G. Beard are Directors.

MARION, IND.—Plans have been completed and bids will be received by Tudor & Co. for the erection of a sterilizing plant, 72 × 132 ft., two stories high, brick and tile roof. Hiram Elder is Arch.

RUSHVILLE, IND.—C. E. Francis & Bro., of Cincinnati, Ohio, have secured a site in this city and will erect a large building and remove factory equipment here. Bids will be asked soon.

SEYMORE, IND.—Bids are asked until Nov. 5, by the Grassle-Mercer Printing Co., for the erection of a 2-story printing plant. G. Grassle is Secy.

DETROIT, MICH.—The Michigan Stove Co. will enlarge its plant by erecting a 7-story addition, 64 × 150 ft., and a 3-story addition, 75 × 150 ft., at an estimated cost of $75,000. George H. Barbour is Gen. Mgr., 1022-56 Jefferson Ave.

Shiels & Allaster, Archs., 1719 Michigan Ave., are preparing plans and will shortly take figures for a large modern laundry for Anthony Rinshed, 43 Tuscola St.

C. F. J. Barnes, Arch., 307 Tolsma Bldg., is preparing plans and will soon ask for bids for owners for a factory building, to be 3-story, 50 × 100 ft., of brick and stone. Estimated cost, $10,000.

The Standard Foundry Co. will erect a large manufacturing plant on Chene St., between Guam and Wight Sts.

GRAND RAPIDS, MICH.—A modern factory will be erected by the Grand Rapids Hand Screw Co. O. B. Wilmarth is Mgr.

The plant of the Malleable Iron Works, which was recently destroyed by fire, will be rebuilt on a larger scale. The fire caused a loss of $200,000.

WAUKEGAN, ILL.—Arthur Stevenson, of Zion City, will erect a factory building here, to cost $200,000.

PONTIAC, MICH.—Fisher Bros., Archs., are preparing plans for a factory, tankhouse and office building for the Price Varnish Co.

MILWAUKEE, WIS.—Wolff & Ewens, Archs., 437 East Water St., will be ready for figures in a few days on the superstructure for the proposed $150,000 3-story brick bottling house for the Miller Brewing Co. building, which will have a ground dimension of 100 × 250 ft., will be of fireproof construction with concrete foundation, structural iron beams and girders and hollow tile partitions. The contract for the foundation has been awarded to the NORTHWESTERN TILE CO., 428 Grand Ave.

The same architects have awarded the following contracts on the proposed $100,000 7-story refrigerator plant to be erected at the foot of Wells St. for the Miller Brewing Co.: Masonry, SCHUETT & FREY, 791 Weil St.; structural iron work, BOLTER & SON, Chicago, Ill. Building will be of fireproof construction with brick exterior walls. Dimensions, 60 × 125 ft.

MANKATO, MINN.—The contracts for the erection of the tub factory here have been awarded as follows: Foundations, THOMAS DUNLEVY; brick work, BISHMAN BROS.

MINNEAPOLIS, MINN.—It is reported that the North Star Boot & Shoe Co. will erect a factory, cost about $325,000.

ST. PAUL, MINN.—Plans are being prepared by Buechner & Orth, Archs., 602 Manhattan Bldg., St. Paul, Minn., for two 3-story buildings, 200 × 150 ft., for the Northwestern Furniture Exposition Co., to be erected on University and Raymond Aves. Estimated cost, $50,000.

JOPLIN, MO.—Contract for structural steel required in the bag building of Picher Lead Co. has been awarded to BARTLETT STEEL CO., of Joplin, Mo. The same company has received the contract for structural steel for new car barn at East Joplin for the Southwest Missouri Railroad Co.

ST. LOUIS, MO.—The St. Louis Sash & Door Co. will erect a new plant at Broadway, Angelrodt and Destrehan Sts., at an estimated cost of $170,000. The buildings will consist of a main warehouse, three stories high, and a basement, 100 × 300 ft., partly mill and partly fireproof construction. The planing mill, which adjoins, will be two stories high, 90 × 138 ft., of joist construction. The power-house adjoining the mill, will be entirely fireproof. Albert B. Groves, 310 North Fourth St., is Arch.

OKLAHOMA CITY, OKLA.—Sioux Powder Co. has been incorporated with $150,000 capital stock by W. F. Harn, A. Harn, of Oklahoma City; James B. Ellis, J. J. O'Rourke, Henry Wendall, of Hawley, Okla., and others.

MATLOCK, WASH.—SAMUEL LEWIS has been awarded the contract to erect a large shingle mill near here for the Port Blakely Mill Co.

NORTH SYDNEY, N. S.—The Government will erect a bait freezer here at a cost of $17,000. Bids will be asked for soon.

WESTVILLE, N. S.—The Sutherland Rifle Sight Co. will erect a factory here at a cost of $20,000.

HALIFAX, N. S.—It is reported that the Intercolonial Ry. will spend several thousand dollars in the erection of a round-house and workshops here. D. Pottinger is Gen. Mgr., at Moncton, N. B., and A. E. Killam is Insp. of Bridges and Bldgs.

TORONTO, ONT.—Clark & Clark will erect a new tannery at a cost of $75,000.

FORT WILLIAM, ONT.—The Canadian Iron & Foundry Co. will erect a large foundry.

SMITH'S FALLS, ONT.—The Smith's Falls Malleable Castings Co. will erect an addition to its plant here.

OTTAWA, ONT.—The General Electric Co., of Schenectady, N. Y., will erect a mica factory on the Chaudier cataract here. The building will be three stories high, 70 × 150 ft.

EDMONTON, SASK.—The E. B. Eddy Co., of Hull, Que., contemplates starting a branch factory here.

NEW WESTMINSTER, B. C.—The Dominion Pipe Co. has secured a site and will soon commence to prepare plans for its factory. The company has a capital of $300,000.

MISCELLANEOUS CONTRACTS.

The names of parties awarded contracts are printed in capital letters.

WOODEN BARGES.—New Orleans, La.—Bids are asked until 11 a. m., Nov. 10, for constructing five creosoted wooden barges. Capt. J. F. McIndoe, Engrs.

JETTIES.—Vancouver, B. C.—The Canadian Pacific Railway Co. will construct jetties at Vancouver, B. C., at a cost of about $1,500,-000. H. B. Walkem is Resident Engr.

WHARF.—Jersey Cove, N. S.—The contract for the construction of a wharf, etc., at Jersey Cove, N. S., has been awarded to HUGH McDONALD, of North Sydney, N. S.

WHARF.—Seven Islands, Que.—Bids are asked by the Public Works Department, Ottawa, Ont., until Oct. 27 for completion of the wharf at Seven Islands, Que. Fred. Gelinas, Secy.

LUMBER.—Detroit, Mich.—W. J. PULLING & CO., Windsor, Ont., have been awarded the contract to supply all the lumber needed in the construction of the tunnel under the Detroit River.

BREAKWATER.—Port Arthur, Ont.—M. J. HOGAN, Montreal, Que., has been awarded the contract for the 2,000-ft. extension to the breakwater, Port Arthur, Ont., which will cost about $375,000.

NAVAL SUPPLIES.—Washington, D. C.—Bids are asked until 10 a. m., Nov. 6, by the Bureau of Supplies and Accounts, Navy Dept., for furnishing at various naval stations and navy yards a quantity of miscellaneous naval supplies. Bids are asked until Nov. 13 for similar supplies. H. T. B. Harris, Paymaster-Gen., U. S. N.

DRAINAGE.—Rockwel[illegible] Iowa.—Bids are asked until Nov. 15 [illegible] Board County Commissioners for con[illegible] a drainage system in Lake Creek a[illegible] Lake Townships. Thomas Parsons, [illegible] Bd. Supervisors.

CONCENTRATOR.—Ely [illegible] The TAYLOR ENGINEERING CO[illegible] Liberty St., New York, has closed a [illegible] for a 500-ton concentrator for the G[illegible] property, at Ely, Nev., to be comp[illegible] within four months.

STEEL HORSES FOR [illegible]—Wheeling, W. Va.—Bids are asked u[illegible] m., Nov. 23, for furnishing and deli[illegible] steel horses for Dams 4 and 5, Kanaw[illegible] Major George A. Zinn, Engrs. (A[illegible]ed, Engineering News.)

SUBWAY.—Reading, Pa.—[illegible] asked until 2 p. m., Nov. 7, for co[illegible] of the subway under the Philadel[illegible] Reading Ry. tracks at Spring St., an e[illegible] of time from Oct. 17 and Oct. 23. E[illegible] Beard, City Engr. (Advertised, Eng[illegible] News.)

COAL-HANDLING PLANT.—[illegible] Quentin, Cal.—The Bureau of Equipme[illegible] Dept., Washington, has awarded to [illegible]OSHOR-PLATT CO., New York, con[illegible] for constructing and installing a coal-[illegible] plant at California City Point, Cal. [illegible] $87,893. Full list of bidders was given [illegible] 11.

DRAINAGE.—Cisco, Ill.—Bids [illegible] received on Oct. 10, by the Drainage [illegible]ssioners of Union Drainage District No. [illegible] Town of Willow Branch and Goose [illegible] Piatt County, for drainage work. W[illegible] Day, Bement, Ill., is Engr. Contract [illegible] awarded to H. S. WALTER, of Weldon, [illegible] 14,267.

TUNNEL.—Boston, Mass.—Bi[illegible] asked until noon, Nov. 8, for constru[illegible] part of Section 11 of the Washington S[illegible] Tunnel under the wing of the City Hospit[illegible] Relief Station and in Haymarket Sq. T[illegible] structure will be mainly of masonry a[illegible] steel. B. Leighton Beal, Secy. Boston Tr[illegible] Comn.

GRANITE ENTRANCE.—Broo[illegible] N. Y.—Two bids were received by the [illegible]partment of Parks on Oct. 18 for furni[illegible] all the labor and materials necessary [illegible] construct and complete granite entrance a[illegible] Ninth Ave. and 15th St., Prospect Park, [illegible] follows: John Heinze, Gowanus Canal, Brooklyn, $23,-120; Cooper & Evans Co., 220 Broadway, New York, $23,380.

WHARVES.—New Orleans, La.—Bids are asked by the Bureau of Yards and Docks, Navy Dept., Washington, until 11 a. m., Nov. 24, for strengthening old and constructing new wharves at the naval station, New Orleans, La. Plans and specifications can be seen at the bureau or will be furnished by the commandant of the navy yard. Mordecai T. Endicott, Ch.

LEVEE.—Bougere, La.—The following are the bids opened on Oct. 4 by Capt. J. F. McIndoe, Corps Engrs., New Orleans, for constructing about 137,000 cu. yds. levee work at Bougere, (a) price per cu. yd.; (b) totals: Linhan Bros. & Mullen, Wallace, (a) 34.4 cts., (b) $47,128; Donovan & Daley, Lake Providence, (a) 32.4 cts., (b) $44,388 (recommended for acceptance).

MONUMENT.—Sewells Point., Va.—The following are the bids opened on Oct. 11 by James Knox Taylor, Supervis. Arch., Washington, D. C., for the construction, including approaches, of a commemorative monument at Jamestown: Norcross Bros., of Worcester, Mass. (six bids), $70,100 to $78,758, and Harrison Marble Co., New York, N. Y. (four bids), $79,852 to $99,725.

RUBBER HOSE.—New York, N. Y.—Bids were received as follows by the Fire Department on Oct. 19th for 50,000 ft. of 2½-in. rubber hose: N. Y. Belting & Packing Co., 91 Chambers St., $70,000; Peerless Rubber Mfg. Co., 16 Warren St., $70,000; Manhattan Rubber Mfg. Co., 18 Vesey St., $51,750; Continental Rubber Co., 127 Duane St., $55,000. For 10,000 ft. of 3-in. rubber hose: Peerless Co., $22,000; Manhattan Co., $17,350; N. Y. Belting Co., $22,500; Continental Co., $15,000.

BULKHEAD.—New York, N. Y.—Bids are asked until noon, Oct. 29, by J. A. Bensel, Comr. of Docks and Ferries, for preparing for and building foundations for the columns of the bulkhead shed in the rear of the bulkhead wall between West 19th and 22d Sts., and the shed column foundations on pier No. 62, near the foot of West 22d St., North River; also for preparing for and laying a concrete pavement over the above-described bulkhead shed area and the deck of Pier No. 62, North River.

AMMUNITION.—Washington, D. C.—Awards have been made by the Bureau of Ordnance, Washington, D. C., as follows: BETHLEHEM STEEL CO., South Bethlehem, Pa., 1,000 3-in. common shells, $2.80 each; 200 4.72-in. A. P. shells, $28.16. AMERICAN & BRITISH MFG. CO., 1,000 6-pounder common steel shells, $1.84. 2,500 6-in. A. P. shells, $22.96. Stocks and plugs for major caliber fuse, U. S. RAPID FIRE RIFLE, GUN & POWER CO., rear plugs, 23 cts. each; front plugs, 17 cts. each. AMERICAN & BRITISH MFG. CO., stocks, $2.40.

STEAM SHOVEL.—Cold Springs, Ore.—The Secretary of the Interior has authorized the purchase of a 70-ton steam shovel for use in the construction of the Cold Springs dam, Umatilla irrigation project, Ore. On Oct. 5 the Department authorized the Reclamation Service to construct this dam by force account, and in order that no time might be lost in initiating work emergency bids were obtained on steam shovels for early delivery. The shovel is to be delivered Nov. 22, and will cost $9,000. It will be furnished by the MARION STEAM SHOVEL CO., of Marion, Ohio.

CANAL WORK.—Portland, Ore.—The Secretary of the Interior has authorized the Reclamation Service to construct under force account or by small contracts to be entered into by the engineer, 13½ miles of canal on the Okanogan irrigation project, Wash. This work consists of an extension of the main canal for a distance of 5.6 miles, and of the lower main canal for a distance of 7.7 miles. The region is remote from railroad transpor-

tation and it is difficult to secure satisfactory bids. It is therefore believed to be to the best interests of the Government to carry on the work as above outlined.

DITCHES.—Alexandria, Minn.—Bids are asked until Oct. 29, 10 a. m., by E. P. Wright, County Audr., for digging and constructing the main ditch and several branches of County Ditch No. 11. Estimated quantities: Main ditch, length 18,533 ft; excavation 41,[illegible] cu. yds.; cost per yd., 12½ cts.; greatest cut 10.3 ft.; width at bottom four feet.; width at top 12 to 16 ft.; soil gravelly clay; total estimated cost $5,218. Four branches, combined length 11,285 ft.; excavation [illegible]361 cu. yds.; average cut three and four feet; cost per yard, 12½ cts.; total estimated cost, $1,545; width at bottom, branches 1 and 4, four feet; branches 2 and 3, two feet.

CEMENT, ETC.—Washington, D. C.—Bids were opened Oct. 17 at the office of Elliott Wood, Supt. of the U. S. Capitol Bldg. and Grounds, Washington, for 30,000 bbls. of Portland cement, 8,000 cu. yds. of sand, and 3,000 cu. yds. of plastering sand. Bids were as follows: Columbia National Sand Dredging Co., Half St. and Georgia Ave., S. E., Washington, concrete sand, $1 per cu. yd.; building sand, $1.15; delivery, 1,800 cu. yds. each per week. L. E. Smoot, foot of Third St., S. E., Washington, concrete or building sand, $1.[illegible]; delivery, 500 cu. yds. of each per week. National Mortar Co., 612 F St., N. W., Washington, cement, in sacks, $1.93 per bbl.; [illegible]½ cts. for return of bags; $1.89 in bbls.; 5 cts. for return of bbls. Atlas Portland Cement Co., New York, cement, $1.82 in wood; $1.87 in duck; 7½ cts. for return of bags.

WATERWAY.—Peterboro, Ont.—Authority will be sought from Parliament at its next session for the immediate completion of the Trent waterway from Lake Simcoe through to Georgian Bay, and it is hoped that by spring of 1908 an 8-ft. waterway will be available from Georgian Bay and the Upper Lakes down as far as Peterboro. "This will involve an outlay of probably $500,000. There is already a water route open from Peterboro to Lake Simcoe, so what remains is the deepening of the Severn River at any points where there is less than 8 ft. of water. The lower end of the Trent waterway from Peterboro to Lake Ontario is still being surveyed, but it seems to be certain the outlet will be at Trenton. A survey is also being made of the Port Hope route, but the other seems to be approved both as the natural line physically and from the commercial point of view."

ORDNANCE.—Washington, D. C.—Bids were received Oct. 12, at the Bureau of Ordnance, War Dept., Washington, for Ordnance, as follows: (a) 200 6-in. armor-piercing shot; (b) 1,000 6-lb. shells; (c) 1,000 3-in. A. P. shells; (d) 200 4-point 72-in. A. P. shells; (e) 2,500 6-in. A. P. shells. Firth-Sterling Steel Co., McKeesport, Pa., (a) $30 each; Bethlehem Steel Co., South Bethlehem, Pa., (b) $1.91 and $2.18, (c) $2.80, (d) $14.36, (e) $24.96, (a) $28.16; Midvale Steel Co., (e) $29, (a) $29.90; American & British Mfg. Co., (b) $1.59, (e) $22.96, 1,000 6-lb. common steel shells, $1.84, 1,000 3-in. common steel shells, $2.98, also for parts of major calibre detonating fuses, as follows: (f1) stocks, in lots of 10,000, (f2) rear plugs, same, (f3) front plugs, same, (g1) stocks, in lots of 5,000, (g2) rear plugs, same, (g3) front plugs, same, (h1) sets, in lots of 10,000, (h2) sets in lots of 5,000; United States Rapid Fire Gun Powder Co., (f1) $2.42, (f2) 23 cts., (f3) 17 cts., (g1) $2.55, (g2) 26 cts., (g3) 20 cts.; Bethlehem Steel Co., South Bethlehem Pa., (g1) $3; American & British Mfg. Co., (f1) $2.40, (g1) $2.44, (f2) 33 cts., (g2) 34 cts., (f3) 25 cts., (g3) 26 cts., (h1) $2.93, (h2) $2.98.

DREDGING.—Philadelphia, Pa.—Contract was awarded on Oct. 18 by the Director of Public Works to the AMERICAN DREDGING CO., of this city, for three of the five sections of the 30-ft. Delaware Channel work between Christian St. and the Pennsylvania-Delaware State line. The prices are those named in bids opened Aug. 15, after the efforts of former Director Hicks, who, by arranging with the United States for the dredging of two sections, succeeded in bringing the total cost of the work down by one-third. The American Dredging Co. agrees to dredge a channel 30 ft. deep and 600 ft. wide through the three sections for the following prices: Section 6 A, at 13.9 cts. per cu. yd., $150,100; Section 6 B, at 14.75 cts., $148,100; and Section 9, at 17.51 cts., $148,100. This makes $430,400 for these sections. Major Sanford estimates that the government dredges will do the work in the other two sections at 10 cts. a yard, or for $207,200. The original bids on the work aggregated $975,987, against $637,600, now figured. It is estimated that this cost will be raised to $700,000 by incidental expenses and supervision by engineers. The amount available by joint State and city appropriation is $750,000. Contracts call for completion by June 30, 1908.

U. S. POSSESSIONS AND CUBA.

The names of parties awarded contracts are printed in capital letters.

SUCTION DREDGES.—Panama.—Requisitions have been received and advertisement will soon appear for two 20-inch suction dredges for use on the Isthmus. One is to be delivered at Colon, and the other at La Boca. The length of the dredges will be 124 ft. 3 ins. over deck; breadth, 36 ft. 6 ins.; depth, 9 ft. Bids will be opened about Dec. 10.

EARTH-SPREADERS. — Panama. — Bids were opened Oct. 23, at the office of D. W. Ross, Isthmian Canal Comn., Washington, D. C., for ten earth-spreaders for the Isthmus of Panama. Bids were as follows: Oswald F. Jordan, 653 Railway Exchange Bldg., Chicago, Ill., $57,000, Colon delivery; $49,500 f. o. b., Harvey, Ill.; time, 110 to 140 days. Mann-McCann Co., Chicago, Ill., $67,770; Colon; time, 160 to 200 days. Wm. J. Oliver Mfg. Co., Knoxville, Tenn., $49,500; Colon; time, 120 to 200 days. This is the third time that bids have been received for these same earth-spreaders.

READERS' WANTS FOR THOSE IN THE MARKET

The readers of ENGINEERING NEWS are constantly in the market for great quantities of machinery, tools and general supplies. While our thousand advertisers are usually able to furnish the material desired, yet there are many things wanted by our readers that are not advertised, although connected with engineering and contracting directly or indirectly. This department (R-W) is for this class of inquiries, and we urge our readers to keep us informed. Enclose five cents in stamps and we write to a number of leading manufacturers without further cost. When writing to our advertisers, who are the leaders in their respective lines, mention Engineering News. Have you a copy of our Buyers' Guide? Engineering News Can Help Buyers.

ROCK-CRUSHING PLANTS.—Canal Zone. —George M. Wells, Asst. Engr., Cristobal Canal Zone, writes us that he desires information relative to rock-crushing plants for concrete work.

CEMENT OR CONCRETE BLOCK MACHINERY.—Salem, Va.—Lewis W. Langhorne, Salem, Va., writes us that he is desirous of information relative to cost, etc., of cement or concrete block machinery.

ENGINE AND BOILER.—Washburn, N. Dak.—Charles P. Bergstrom, Washburn, N. Dak., writes us that he desires to purchase a small 1½ or 2-HP. stationary engine and boiler, heated by gasoline or kerosene.

CONCRETE MIXER.—Jersey City, N. J.—We are in receipt of a letter from Swift and Company, Purchasing Dept., Jersey City, N. J., in which it states that it desires to rent for six months a second-hand Ransome or Smith concrete mixer, ⅜-yd. capacity.

CEMENT BLOCK CONSTRUCTION.—West Palm Beach, Fla.—G. L. Metcalf, Secy., writes us that the Board of School Trustees is interested in the erection of a concrete block school building, and desires prices and information from contractors doing such work.

COLD WATER AND FIREPROOF PAINTS. —Newport News, Va.—Alsop and Pierce, Contracting Engineers, Newport News, Va., write us that they desire the names of manufacturers of fireproof and "cold water" paints.

AIR COMPRESSOR.—Winnipeg, Can.—We are in receipt of a letter from Anderson & Johnson, 299 Victor St., Winnipeg, Can., in which they state they are in the market for a second-hand air compressor and ten or twelve drills.

CONTRACTORS' SUPPLIES AND EQUIPMENT.—Dayton, Ohio.—J. F. Scott, Dayton, Ohio, writes us that he is interested in the construction of a sand-lime brick plant and is in the market for the following supplies and equipment: Slide valve and Corliss engines; horizontal, tubular and water-tube boilers; wire rope; track and cars; belting; power transmission; pumps, power and steam; roofing; steam fittings; water tanks; pipe and boiler covering; pulverizers; crushers; blowers; conveyors; pulleys and stream traps.

DYNAMITE.—Panama.—Bids will be asked very soon by the Isthmian Canal Commission, Washington, D. C., on several large requisitions for dynamite, to be used in blasting work on the Canal. The quantities are about as follows: 400,000 lbs. saltpetre dynamite, 45%; 100,000 lbs. of the same, 60%; 30,000 30-ft. electric exploders, double strength; 10,000 35-ft., same.

LUMBER, ETC. — Panama. — Requisitions have been made on the Isthmian Canal Commission, Washington, D. C., for the following engineering supplies, and bids will be asked upon them as soon as specifications are prepared: Lumber, S. 4 S.: 800,000 ft. B. M., 2 × 4-in.; 600,000 ft. B. M., 2 × 6-in.; 500,000 ft. B. M., 2 × 8-in.; 500,000 ft. B. M., 2 × 10-in.; 500,000 ft. B. M., 2 × 12-in.; 1,000 stringers and 2,900 sways (various sizes), for trestle work; 11,000 ft. crucible cast-steel rope.

CABLE.—Cuba.—The Commercial Cable Co. of Cuba, with a capital of $100,000, was recently incorporated in New York, to connect New York with Havana by cable and land telegraph. The cable will run from Florida to Kew West, and then to Havana. The directors are: Clarence H. Mackay, William H. Cook, Samuel Dickinson, George Clapperton and Albert Beck, of New York; Dumont Clarke, of Dumont, N. J., and Albert B. Chandler, of Brooklyn. The company will give the Postal Telegraph Cable Co. connection in a field now held by its rival.

RAILWAYS.—Philippines.—A report from San Francisco states that the "Philippine Railway Co. is preparing to push operations on the new roads that are being constructed on the islands of Panay, Negros and Cebu. W. P. Poland, formerly an official in the Alaska Central Railway, has been appointed Vice-President and Chief Engineer of the Philippine roads. He will leave San Francisco for the Orient about Nov. 1 to take complete charge of the new work. For the construction of the road a large amount of material has been ordered. 8,000 tons of rails are now on the way to the islands by way of the Suez Canal. The entire cost of the Philippine system when completed will approximate about $30,000,000."

MEXICO.

The names of parties awarded contracts are printed in capital letters.

WATER-POWER.—Veracruz.—Julio Pinal, Escobilleria No. 1, City of Mexico, has applied for a concession to utilize 15,000 liters of water per second, from the Actopam River, in the State of Veracruz, for motive power.

HORSESHOE FACTORY.—City of Mexico. —Alexander Ainslie, of the City of Mexico, has applied for a concession to establish one or more factories for manufacturing horseshoes and the respective nails from iron or steel.

ELECTRIC TRAMWAYS.—San Pedro de las Colonias, Coahuila.—A company has been organized in San Pedro de las Colonias, Coah., for the establishment of an electric tramway system in that town. It is stated construction will commence soon.

ELECTRIC LIGHTING PLANTS.—Atotonilca and Arandas, Jal.—M. P. Sheridan is arranging for the organization of a company to furnish electric lights for the towns of Atotonilco and Arandas, in the State of Jalisco. It is stated that water powers are available for generating the electric current.

WATER WORKS AND SEWERAGE.—Torreon, Coahuila.—The contract for the construction of water-works and sewerage for the city of Torreon, Coah., has been awarded to MACKIN & DILLON. The cost will be about $600,000. Work will be started at once, under the personal charge of Mr. Mackin.

SEWERAGE.—Tampico, Tamaulipas.—The contract for the sewerage of Tampico, Tam., has been awarded to WILLIAM ASTOR CHANLER, of New York. The contract calls for an expenditure of $811,448, and the works must be completed within three years from Oct. 12. The contractor has deposited $50,000 in bonds of the 5% internal redeemable debt, in the National Bank of Mexico, as a guarantee for the fulfillment of the obligations of the contract.

RAILWAY STATIONS.—Coahuila.—Within a short time the Mexican Central Ry. Co. will commence work on a new passenger station in Saltillo, Coahuila, to cost about $40,000. Another station, built from the same design, will be erected in the city of Guanajuato. Lewis Kingman, City of Mexico, is Ch. Engr.

WHARF.—Port Marquez, Guerrero.—The Department of Public Communications and Works has granted an amendment of the concession of Sept. 22, 1904, held by the Dicha Mining & Smelting Co., of La Dicha, Guerrero, extending the period for commencing the construction of a wharf at Port Marquez, until Jan. 15, 1907.

IRON FOUNDRY.—Torreon, Coahuila.—The Torreon Iron Works will soon begin the erection of a new foundry building, 60 × 120 ft. It will be equipped with a modern 20-ton jib crane and other modern appliances to handle heavy work. The officers of the company are Emilio P. Stein, E. H. Barton and W. Newman.

RAILWAY.—Hunuxma-Sisal, Yucatan.—A concession has been granted Lic. Rafael Donde, of the United Railroads of Yucatan, to build a railway between Hunuxma and Sisal. Five kilometers must be completed before Sept. 22, 1907, and five kilometers each succeeding year, so as to complete the entire line by Sept. 22, 1911.

HYDRO-ELECTRIC PLANT.—Veracruz.—S. Pearson & Son, Ltd., Long Island City, N. Y., have petitioned the Department of Fomento for a concession to utilize the waters of the Antigua River, in the State of Veracruz, to generate electric power. The representative of Pearson & Son, in the City of Mexico, is J. B. Body, Puente de Alvarado, No. 15.

DAM.—Coahuila.—Guillermo de Landa y Escandon, Governor of the Federal District, as representative of the International Ry. Co., has petitioned the Department of Fomento for the right to use the waters of El Chivo Arroyo, in the State of Coahuila, for the uses of the company. It is proposed to build a dam to store water during the rainy season.

IRRIGATION WORKS.—Casas Grandes, Chihuahua.—E. C. Houghton, Gen. Mgr. of the Corralitos Land & Cattle Co., of Casas Grandes, State of Chihuahua, has applied to the Department of Fomento for a concession for water rights, and the privilege of building dams on the Janos or San Pedro Rivers, which flow through the company's lands, for irrigation purposes.

AERIAL TRAMWAY.—Batopilas, Chihuahua.—The Batopilas Mining Co., with headquarters at 45 Broadway, New York, operating mines at Batopilas, State of Chihuahua, is preparing to place an order for the material for an aerial tramway about seven miles long. The tramway is to be used to transport wood for use in the mills of the company. Walter M. Brodie is Mgr.

HYDRO-ELECTRIC PLANT.—Sonora.—Engineers are in the field surveying lines, etc., for the hydro-electric plant to be constructed by the Green Consolidated Mining Co., of Cananea, Sonora. The power plant will be located on the Aros River, and will furnish power for the town of Cananea and for the mines of the Greene Co., also the sawmills, etc., of the Sierra Madre Land & Lumber Co. The transmission line will be about 150 miles in length.

MASONIC TEMPLE.—City of Mexico.—A Masonic temple is to be erected in the City of Mexico, to cost, exclusive of land, about $120,000. It has been decided to purchase, for $80,000, a lot opposite the new building of the Department of Communications. $130,000 of the $200,000 required has been subscribed. The permanent building committee consists of J. C. Mordough, C. R. Pullen, W. A. L. Schafer and W. L. Vail. The building will accommodate all the Masonic bodies in the City of Mexico.

CRACKER FACTORY.—Guadalajara, Jal.—A. A. Neil, the principal stockholder of the company owning the cracker factory in Hermosillo, State of Sonora, has secured from the State government of Jalisco a concession for a cracker factory in the city of Guadalajara. It is stated $100,000 will be invested in the plant. The factory must, under the terms of the concession, be in operation within two years and the monthly output amount to at least 40,000 kilos. Exemption from all state and municipal taxes for a period of 20 years is granted. Mr. Neil may be addressed at Hermosillo, Sonora.

RAILWAY.—Sonora.—J. J. Hardwick, of Los Angeles, Cal., is the concessionaire for a line of railway in the state of Sonora, to be known as the Sonora Central. Engineers are now on the final location survey. The line will run from the Copete mining district to Carbo, one of the junction points on the Sonora Ry., thence to Ures, and from the latter point to connect, at a suitable point, with the Cananea, Rio Vaqui and Pacific Ry., a property of the Southern Pacific system. Mr. Hardwick states that construction of the first division, from the Copete mining district to Carbon, will be commenced during the coming winter.

RAILWAY.—Guanajuato.—A concession has been granted to Andres Bermejillo & Co. and Jose M. Zaldivar y Flores, for the construction of a railway from Salvatierra to Yuririapundaro, with the right to extend the line to Moroleon, all in the State of Guanajuato, or to Puruandiro in the State of Michoacan. Surveys must commence within six months from Sept. 24, and at least five kilometers of road completed within 18 months, and ten additional kilometers each following year, so as to complete th eline in five years. The concessionaires have deposited $15,000 in bonds of the Consolidated Public debt to guarantee the execution of the work. Andres Bermejillo & Co. are bankers in the City of Mexico.

HYDRO-ELECTRIC PLANT.—Iturbide District, Chihuahua.—The firm of Schondube & Neugebauer, of the City of Mexico, has been granted a concession to utilize the water necessary to utilize 10,000 liters of water, per second, as a maximum, from the Conchos River, in the Iturbide District, State of Chihuahua. Aerial or subterranean lines may be used to transmit the electric energy to be generated. Construction must begin withing 20 months, and the whole work completed within the following seven years. Free importation of the necessary material for the works is allowed for once only, and capital exempted from taxation for five years. The address of Schondube & Neugebauer is P. O. Box 756, City of Mexico.

RAILWAY.—Puerto Marquez-La Dicha, Guerrero.—The government has granted a concession to the Dicha Mining & Smelting Co. to build, and operate for a period of 99 years, a narrow-gage railway connecting the town of La Dicha with the Pacific port of Puerto Marquez, in the State of Guerrero. A branch is contemplated to run to the city of Acapulco, and the company may extend the main line to Chilpancingo. It is said construction will commence in about six months, and 20 kilometers must be completed before Nov. 25, 1907, and 20 kilometers each succeeding year, so that the road will reach Acapulco by Nov. 25, 1910. This road will open up a rich mining country, and will, also, facilitate traffic between Acapulco and Puerto Marquez, the only present communication being by steamer or wagon road.

HOTEL.—City of Mexico.—A syndicate has been formed to erect a 4-story modern hotel, on the tract of land at the corner of Paseo and Bucareli Sts., City of Mexico. Plans have been made for a structure to cost about $1,250,000. It is stated construction will commence during the coming year. The following residents of the City of Mexico are interested: Guillermo Landa y Escandon, Dr. Fernando Pimentel, Victor M. Garces, Julio Limintour, Pable Macedo, Jose Lozano y Echeverrio, Pastor de Celis, J. D. Casasus, A. Lopez Negrete, J. Salcado, Jose Juis Requena, Frederico Kladt, Fernando Duret, Thomas Jn Ryder, Carlos Bracho, Ramon Alcazar, L. Barraso Arenas, Hugo Scherrer, Jr., and Manuel Buch. Before commencing work a careful study of hotel construction in the United States and Europe, will be made by an agent of the company.

REDUCTION PLANT.—Guanajuato, Gto.—The Guanajuato Development Co., of New York, is taking preliminary steps to merge under the control of one company a majority of the mining properties on the mother vein, in that district, take out the low grade ore, which exists in unlimited quantities, and construct a reduction plant of a daily capacity of 10,000 tons. To secure power for the operation of the plant the company has already purchased the San Isidro y Anexas ranch, where it is intended to construct two large impounding reservoirs, with a joint capacity of more than 1,000,000,000 gallons. The mill will be constructed in units of 1,000 tons daily capacity, and additions made as required, and it is hoped to arrange for the commencement of work by the first of next year. Geo. W. McElhiney, of New York, is Pres. of the company.

RAILROAD.—Guanajuato.—The Morelia & Tacambaro R. R. Co. has begun work on a new railroad in Mexico, to run from Irapuato, state of Guanajuato, on the Mexican Central, south via Peruandiro, state of Michoacan, to Morelia, on the Mexican National, Tacambaro, and then west to Ario, in all about 225 miles. The cost of building the line will be about $4,000,000. The company plans ultimately to extend its lines south and east along the Balsas River from Ario to the Pacific coast. The Mexican Government has granted concessions, giving right-of-way and terminals, and exemption for five years from import duties on construction material. The state of Michoacan agrees to pay $30,000 Mexican for each ten kilometers built in the state. The contract for the first section of about 50 miles has been let to HAMPSON & SMITH, of Mexico City, and for 5,000 tons of 60-lb. rails to the PENNSYLVANIA STEEL CO. The road is capitalized at $6,000,000. Edson J. Chamberlin, formerly Gen. Mgr. of the Canada Atlantic, is Pres.; Gilbert E. Fauquier, of the Pacific Construction Co., of Ottawa, is Vice-Pres. and Gen. Mgr. Jacob L. Greatsinger, former Pres. of the Brooklyn Rapid Transit Co., and Albert J. Peyton, of A. J. Peyton & Co., of New York, are also interested.

CONTRACT PRICES.

*WATER PURIFICATION PLANTS.—New Orleans, La.—We are officially advised that contract was signed on Oct. 8 by BLACK & LAIRD, Godchaux Bldg., New Orleans, for Contract 12-W, which is for the following work: For furnishing and erecting two complete water purification plants—one of 40,000,000 gallons' capacity and one of 4,000,000 gallons' capacity—including excavations, foundations, concrete masonry, reservoirs and filters, head-houses, pumping station building, wharf and intake, coal storage, machinery for handling coal, and other mechanical equipment, and all piping and appurtenances complete, ready for operation. Bids were received on Sept. 5 by the Sewerage and Water Board, George G. Earl, Gen. Supt. List of bidders and tabulated bids are here given: (A) BLACK & LAIRD, New Orleans, La.; (B) The Scofield Co., Philadelphia, Pa.; (C) N. Y. Continental Jewell Filtration Co., New York, N. Y.:

BIDS RECEIVED FOR TWO WATER PURIFICATION PLANTS, NEW ORLEANS, LA.

	Quantity.	(A)	(B)	(C)
For all excavations 6 ft. and under, per cu. yd.	72,600	$0.33	$1.25	$1.10
For all excavations over 6 ft., per cu. yd.	31,600	.90	3.00	1.50
For overhaul, per 100 ft., per cu. yd.	80,000	.10	.40	.05
Each test loading of soil	4	465.00	323.10	1,800.00
Seeding, per acre	14	40.00	435.25	470.00
Brick filling, per cu. yd.	100	3.00	3.30	2.25
Cinder filling, per cu. yd.	100	3.00	2.07	1.50
Shell filling, per cu. yd.	100	3.00	3.10	2.30
Batture sand filling, per cu. yd.	200	1.00	1.47	.95
Gravel roads, per cu. yd.	6,500	4.00	6.08	4.40
Concrete curbing, per cu. yd.	210	14.00	15.04	15.80
Cypress curbing, per 1,000 ft. B. M.	2,000	34.00	59.40	37.00
Granite curbing, per sq. ft.	375	.75	.67	1.10
Gutter paving, vitrified brick, per sq. yd.	900	2.72	2.11	2.20
Gutter paving, Belgian block, per sq. yd.	900	2.72	2.77	2.80
Sheet piling, per 1,000 ft. B. M.	2,500,000	50.00	60.00	70.00
Sheet piling, creosoted, per 1,000 ft. B. M.	85,000	90.00	90.00	95.00
Round piling, per lin. ft.	300,000	.25	.15	.39
Round piling, creosoted, per lin. ft.	16,800	.60	.50	.58
Concrete, Class "A," per cu. yd.	4,137	14.00	9.50	12.70
Concrete, Class "B," per cu. yd.	2,194	16.00	9.50	15.60
Concrete, Class "C," per cu. yd.	22,915	12.00	9.50	12.30
Concrete, Class "D," per cu. yd.	13,410	10.00	9.00	8.60
Concrete, Class "E," per cu. yd.	2,784	16.50	18.00	17.70
Concrete, Class "F," per cu. yd.	4,493	11.00	13.25	11.00
Concrete, Class "G," per cu. yd.	952	10.00	13.25	9.00
Concrete, Class "H," per cu. yd.	2,979	10.00	8.30	8.70
Concrete, Class "I," per cu. yd.	637	12.50	10.25	10.90
Concrete, Class "J," per cu. yd.	556	10.00	7.80	7.50
Schillinger pavement, per sq. yd.	1,550	1.80	2.04	2.00
Brick masonry, per cu. yd.	175	15.00	16.96	15.20
Steel rods, plain, per lb.	1,826,000	.04	.0335	.045
Steel rods, deformed, per lb.	409,000	.05	.0404	.05
Structural steel, per lb.	200,000	.06	.0515	.05
Iron castings, per lb.	97,000	.03½	.0454	.06
Machine bolts, per lb.	11,000	.06	.0605	.06
Drift bolts, per lb.	1,500	.06	.06	.06
Cast-iron washers, per lb.	8,500	.03½	.0454	.045
Hub and spigot, c.-i. pipe, per ton of 2,000 lbs.	1,500	70.00	49.38	55.00
Hub and spigot, specials, per ton of 2,000 lbs.	130	90.00	108.87	100.00
Flanged pipe, per ton of 2,000 lbs.	5	98.00	105.06	100.00
Flanged specials, per ton of 2,000 lbs.	107	110.00	116.16	120.00
Raw water pipe (riveted steel), lump sum		2,516.00	2,865.50	3,212.00
Both wash water tanks, New Orleans, lump sum		2,790.00	20,457.00	14,140.00
Both wash water tanks (Algiers), lump sum		2,200.00	3,066.50	2,742.00
Filter air tank, New Orleans, lump sum		2,231.00	3,012.45	3,000.00
Both filter air tanks (Algiers), lump sum		598.00	848.95	759.00
Both head-house air tanks, N Orleans, lump sum		1,242.00	1,580.10	1,759.00
Vitrified terra cotta pipe, 4-in., per lin. ft.	125	.40	.21	.20
Vitrified terra cotta pipe, 6-in., per lin. ft.	305	.60	.25	.25
Vitrified terra cotta pipe, 8-in., per lin. ft.	1,147	.70	.39	.40
Vitrified terra cotta pipe, 10-in., per lin. ft.	1,540	.80	.51	.55
Vitrified terra cotta pipe, 12-in., per lin. ft.	65	1.00	.64	.70
Vitrified terra cotta pipe, 15-in., per lin. ft.	1,010	1.50	.88	.85
Vitrified terra cotta pipe, 18-in., per lin. ft.	1,690	2.05	1.30	1.10
Vitrified terra cotta pipe, 20-in., per lin. ft.	1,670	2.55	1.65	1.50
Vitrified terra cotta pipe, 24-in., per lin. ft.	1,750	3.40	2.34	1.85
Vitrified terra cotta pipe, 30-in., per lin. ft.	745	4.80	3.65	2.75
Vitrified terra cotta pipe, 36-in., per lin. ft.	1,170	5.50	5.36	5.25
Complete strainer system (N. Orleans), lump sum		24,953.00	26,496.00	35,000.00
Complete strainer system (Algiers), lump sum		1,882.00	1,721.00	1,807.00
All filter gravel (New Orleans), lump sum		1,008.00	1,674.75	880.00
All filter gravel (Algiers), lump sum		100.00	127.00	52.00
Filter sand, per cu. yd.	1,672	5.50	7.00	3.85
All piping in filters (New Orleans), lump sum		40,817.00	31,094.90	55,277.00
All piping in filters (Algiers), lump sum		5,000.00	7,288.00	11,026.00
All pipe supports, filter gallery (N. O.), lump sum		1,800.00	3,124.30	3,804.00
Clear water reservoir gage, lump sum		115.00	145.53	100.00
Both equalizing reservoir gages, lump sum		230.00	346.50	220.00
Each operating table, lump sum	14	700.00	1,143.45	558.00
Each extra operating table, lump sum	2	650.00	924.00	318.00
Each filter controller (New Orleans), lump sum.	10	110.00	1,767.15	1,420.00
Each filter controller (Algiers), lump sum	4	110.00	1,767.15	1,125.00
Each filter controller regulator, lump sum	2	200.00	808.50	614.00
Each chemical controller, lump sum		400.00	3,927.00	3,900.00
Each chemical controller regulator, for each	3	600.00	1,079.95	1,032.00
Each proportional raw water controller, for each	3	600.00	829.00	558.00
All of the orifice gates (New Orleans), lump sum		3,000.00	6,353.00	1,677.00
All of the orifice gates (Algiers), lump sum		600.00	1,155.00	469.00
Drainage pump and motor, lump sum		5,850.00	6,815.00	7,500.00
All piping in head-house (N. Orleans), lump sum		4,300.00	5,279.00	17,500.00
All piping in head house (Algiers), lump sum		1,000.00	1,877.00	4,100.00
Stirring machinery, in lime coagulant and soda mixing and solution tanks (N. O.)		3,200.00	4,943.00	5,664.00
Stirring machinery, in lime coagulant and soda mixing and solution tanks (Algiers)		3,200.00	3,234.00	1,341.00
Ventilating system (New Orleans), lump sum		1,800.00	1,404.00	1,790.00
Ventilating system (Algiers), lump sum		1,100.00	465.00	580.00
Coagulant piping in reservoirs (N. O.), lump sum		1,300.00	1,760.00	1,825.00
Coagulant piping in reservoirs (Algiers), lump sum		1,250.00	1,374.00	498.00
Each chemical solution and recording gage, lump sum	2	150.00	214.00	225.00
Each gage board for solution tanks	15	150.00	104.00	60.00
Clear water reservoir gage board in low lift wing, lump sum		150.00	145.00	150.00
Clear water well gage board in low lift wing, lump sum		150.00	133.00	150.00
Grit reservoir gage board in low lift wing, lump sum		150.00	133.00	200.00
Coagulating reservoir gage board in low lift wing, lump sum		150.00	139.00	200.00
Telephone system, lump sum		600.00	433.00	605.00
Each wooden wiring-pole, 25 ft.	110	9.25	8.34	8.00
Each wooden wiring pole, 35 ft.	26	10.50	9.50	10.00
Each guy stub	10	18.00	16.30	15.00
All ducts in earth, per lin. ft.	3,060	1.50	.92	.60
All ducts in masonry walls, per lin. ft.	3,110	1.00	.23	.20
Lighting and power circuits, lump sum		28,000.00	22,517.00	24,000.00
All bronze, per lb.	1,200	.35	.37	.50
All metal lath, per sq. yd.	5,000	.60	.38	.60
All wire fabric, per sq. yd.	5,000	.60	[illegible]	.58
All steel in expansion joints, per lb.	69,630	.06	[illegible]	.05
All lead in expansion joints per lb.	18,500	.15	[illegible]	.14
All stop plank, per 1,000 ft. B. M.	5,200	70.00	[illegible]	85.00
Each fire hydrant	7	45.00	[illegible]	35.00
Each yard hydrant	26	10.00	[illegible]	17.00
Reservoir flushing system, lump sum		500.00	[illegible]	900.00
Lawn sprinkling system, lump sum		900.00	[illegible]	450.00
Each reservoir sump cover	12	35.00	[illegible]	50.00
Each reservoir ventilator	8	30.00	[illegible]	28.00
Each wall box	12	45.00	[illegible]	50.00
Each skiff	8	35.00	[illegible]	90.00
Forge and anvil, lump sum		70.00	[illegible]	60.00
Coal and ash-handling system, lump sum		25,000.00	[illegible]	27,670.00
Electric elevator in head-house, lump sum		3,250.00	[illegible]	2,800.00
Sack and barrel elevator, lump sum		1,300.00	[illegible]	2,100.00
Hydraulic elevator, lump sum		3,600.00	[illegible]	3,100.00
Telpherage system, lump sum		24,000.00	[illegible]	24,000.00
Electric capstan, lump sum		3,000.00	[illegible]	2,600.00
All yellow pine lumber, per 1,000 ft. B. M.	25,000	40.00	[illegible]	50.00
All creosoted lumber framed, per 1,000 ft. B. M.	123,000	86.00	[illegible]	70.00
All fire brick, per 1,000	2,500	57.00	[illegible]	55.00
Steam pipe to filters and head-house (New Orleans), lump sum		1,360.00	750.00	2,168.00
Steam pipe to filters and head-house (Algiers), lump sum		800.00	390.00	487.00
Venturi meter, 48-in., lump sum		4,200.00	4,297.00	3,950.00
Venturi meter, 10-in., lump sum		1,100.00	1,184.00	1,000.00
Stirring machinery in lime-mixing reservoir (Algiers), lump sum		2,500.00	1,126.00	953.00
Placing controller & regulator in sump, lump sum		500.00	1,733.00	1,122.00
Railroad track, lump sum		6,200.00	5,000.00	6,200.00
Track scales, lump sum		2,500.00	1,857.00	1,750.00
All trucks and scales, lump sum		493.00	426.00	525.00
Pumping station and suction well, lump sum		120,000.00	106,133.00	175,000.00
Head-house, lump sum		34,000.00	23,933.00	70,000.00
Head-house, filter gallery and connection (Algiers), lump sum		25,000.00	15,550.00	33,000.00
Filter gallery building (New Orleans), lump sum.		28,300.00	23,246.00	35,000.00
Both gate-houses, lump sum		1,600.00	1,592.00	2,884.00
Blacksmith shop, lump sum		2,200.00	2,100.00	3,200.00
Coal and coagulant storage building, lump sum.		6,000.00	5,015.00	5,820.00
Radial block chimney, lump sum		10,500.00	10,650.00	10,000.00
Artesian well, lump sum		2,400.00	1,936.00	2,100.00
Each 4-in. plain light gate valve, rising stem.	1	20.15	28.50	19.70
Each 6-in. plain light gate valve, rising stem.	3	26.15	39.00	26.53
Each 8-in. plain light gate valve, rising stem.	6	40.70	50.00	46.13
Each 10-in. plain light gate valve, rising stem.	1	53.00	64.00	63.97
Each 12-in. plain light gate valve, rising stem.	6	83.75	79.00	84.75
Each 16-in. plain light gate valve, rising stem.	2	129.35	120.00	132.72
Each 18-in. plain light gate valve, rising stem.	14	139.75	147.00	148.20
Each 20-in. plain light gate valve, rising stem.	4	182.00	177.00	177.26
Each 4-in. plain heavy gate valve, rising stem.	1	19.20	27.00	18.92
Each 6-in. plain heavy gate valve, rising stem.	2	29.90	41.00	30.32
Each 8-in. plain heavy gate valve, rising stem.	1	44.60	54.00	44.95
Each 10-in. plain heavy gate valve, rising stem.	4	72.30	70.00	73.86
Each 12-in. plain heavy gate valve, rising stem.	6	84.50	94.00	85.80
Each 20-in. plain heavy gate valve, rising stem.	4	219.70	197.00	230.24
Each 4-in. plain heavy gate valve, nonrising stem	1	18.10	20.00	17.56
Each 6-in. plain heavy gate valve, nonrising stem	1	28.90	30.00	29.37
Each 8-in. plain heavy gate valve, nonrising stem	4	41.90	42.00	42.12
Each 10-in. plain heavy gate valve, nonrising stem	1	67.50	50.00	68.85
Each 12-in. plain heavy gate valve, nonrising stem	1	86.45	66.00	87.82
Each 20-in. geared light gate valve	4	174.20	187.00	183.00
Each 30-in. geared light gate valve	4	351.00	375.00	326.70
Each 48-in. geared light gate valve	5	1,141.40	1,109.00	1,177.80
Each 24-in. geared heavy gate valve	2	426.40	295.00	435.00
Each 42-in. geared heavy gate valve	1	1,123.20	1,058.00	1,158.90
Each 48-in. geared heavy gate valve	1	1,592.50	1,470.00	1,664.25
Each 10-in. hydraulically operated light gate valve	4	104.00	115.00	106.65
Each 12-in. hydraulically operated light gate valve	1	136.50	151.00	142.00
Each 20-in. hydraulically operated light gate valve	14	214.50	357.00	221.50
Each 30-in. hydraulically operated light gate valve	10	425.10	566.00	443.70
Each 6-in. hydraulically operated h'vy gate valve	8	59.80	93.00	62.25
Each 8-in. hydraulically operated h'vy gate valve	1	87.10	133.00	89.70
Each 10-in. hydraulically operated h'vy gate valve	5	111.80	167.00	115.90
Each 12-in. hydraulically operated h'vy gate valve	12	136.50	197.00	143.00
Each 14-in. hydraulically operated h'vy gate valve	4	154.70	254.00	165.90
Each 20-in. hydraulically operated h'vy gate valve	11	351.00	448.00	372.75
Each 24-in. hydraulically operated h'vy gate valve	10	555.10	602.00	578.25
Each 8-in. circular sluice gate, with rising stem	8	91.40	152.00	60.00
Each 18-in. circular sluice gate, with rising stem	18	148.20	197.00	170.48
Each 30-in. circular sluice gate, with rising stem	1	236.60	363.00	277.63
Each 36-in. circular sluice gate, with rising stem	2	284.70	416.00	326.72
Each 60-in. circular sluice gate, with rising stem	1	809.90	928.00	780.00
Each 48 × 48-in. rectangular sluice gate, with rising stem	22	562.90	731.00	626.00
Each 48 × 60-in. rectangular sluice gate, with rising stem	7	601.90	871.00	697.96
Each 60 × 60-in. rectangular sluice gate, with rising stem	4	796.90	1,072.00	800.00
Each 60 × 72-in. rectangular sluice gate, with rising stem	2	842.40	1,234.00	880.00
Each 72 × 72-in. rectangular sluice gate, with rising stem	6	1,037.40	1,300.00	950.00
Each 72 × 84-in. rectangular sluice gate, with rising stem	1	1,105.00	1,694.00	1,100.00
Each 30-in. hydraulically operated circular sluice gate	2	296.40	424.00	325.00
Each gate stand	16	25.00	25.00	15.00
Extension stems, per lb.	2,200	.15	.09	.09
Each vertical balance gate	10	100.00	79.00	80.00
Each balance relief valve	2	100.00	74.00	75.00
Ventilating fan for filter gallery, lump sum		348.00	334.00	350.00
Electric locomotive and trailers, lump sum		5,200.00	6,023.00	5,150.00
Each 36 × 36-in. rectangular sluice gate, with rising stem	13	296.40	537.00	330.60
Grand total		$1,840.727	$1,897.298	$2,129.342

FOREIGN CONTRACTS.

The names of parties awarded contracts are printed in capital letters.

DWELLINGS COMPETITION.—Argentina.—The municipality of Buenos Aires has decided to hold a competition for plans for workmen's dwellings. Prizes, $1,250, $750 and $500. Apply Secretaria de la Intendencia Municipal, Buenos Aires, Argentina.

RAILWAY EQUIPMENTS.—According to the London "Times" the execution of the following works has been agreed upon, and the necessary amounts have been voted. It is expected that tenders will be called for shortly: (1) Mexico—Railways Department—Construction of iron and steel bridge; estimated $2,000,000. (2) Argentina—Government Railways Department—Construction of railway from Quaiaca to Tupiza; estimated cost, 2,700 000 piasters. Also construction of railway between Villa Mercedes and Mendoza. (3) Malines, Belgium—Chemin de fer de l'Etat—Six contracts for fittings, etc., for the construction of locomotives of the Atlantic type and of model 8; also 50 contracts of various iron and steel material; particulars from M. de Rudder, 11 Rue de Louvaine, Brussels. (4) Liege, Belgium—Construction of station; estimated cost, $450 000. (5) Brussels—Government Railways—(a) Accessories and appliances for electric train lighting; (b) vignole rails, fish plates, bolts, etc., annual contract; also 22 contracts for boilers, machine tools, etc. (5) Extension of railways in Queensland, Australia, by Government at an estimated cost of $1,500,000. (6) Construction of underground electric railway at Buenos Aires; estimated first contract, $240,000; address Senheres Guesada y Gallo, Buenos Aires, Argentina.

BRIDGES, ETC.—Samoa.—Consul-General George Heimrod reports from Apia that during the course of this year the German Government of Samoa contemplates various improvements, comprising principally the building of several bridges and appliances for road construction. Mr. Heimrod continues: "Usually competition for such material has been confined to German manufacturers, but through special effort I have been able to obtain the necessary information and the assurance that American manufacturers will enjoy an equal chance in competition with the German manufacturers. Estimates for the articles enumerated below should be sent to C. Lammert, C. E., Apia, Samoa, who will also correspond with anyone interested desiring more definite information: (1) A steam road roller; weight, 10 to 16 tons. (2) A stone crusher for breaking hard and medium hard basalt and lava for macadamizing roads. Capacity per hour, 4 to 6 cu. meters. The engine serving the road roller will be temporarily utilized for the stone crusher. (3) Iron bridges of various types; length of spans, 10, 15, 20, 30, 40 meters; width, 6 to 7 meters, with stone masonry piers or iron pillars, riveted or screwed to the superstructure. (4) Portable and industrial tracks with cars, etc., for the transportation of road material; gage, 0.60 meter. (5) Machinery for drilling wells to an approximate depth of 40 meters. Well pumps to be worked by hand power or mechanical devices. Windmills, water tanks and hydraulic rams. (6) Iron pipes and appliances for the equipment of cacao and copra dryers. (7) Furnaces in which corals are burned and reduced to lime. (8) Machinery for making cordage of coir. (9) Iron molds for making drainage pipes and concrete blocks for the construction of buildings. (10) A substitute for coal oil to light the streets.

CIVIL SERVICE EXAMINATIONS

ELECTRICIAN.—Wyoming.—An examination will be held on Nov. 14 by the U. S. Civil Service Commission to fill a vacancy in position of Electrician, at $1,000 a year, in Quartermaster's Department at Large, at Fort D. A. Russell. Application Form No. 1,052.

CHAINMAN, LEVELER, ETC.—Albany, N. Y.—Examinations will be held on Nov. 17, by the State Civil Service Commission, for the following positions: Open to residents of New York State—Chainman, State Engineer's Department, $2.50 a day. Open to residents and non-residents—Leveler, $4.50 to $5 a day; Rodman, $3.50 to $4 a day. Inspectors, State Commission of Gas and Electricity, $1,000 to $1,800. (Advertised, Engineering News.)

MECHANICAL DRAFTSMEN.—Washington, D. C.—On Nov. 21 an examination will be held by the U. S. Civil Service Commission to secure eligibles to fill two vacancies in the position of Mechanical Draftsman, $1,500 a year each, in the Engineer Department at Large, one at Wheeling, W. Va., and the other at Chattanooga, Tenn., and vacancies as they may occur in any branch of the service requiring similar qualifications. Application Form No. 1,312.

INDUSTRIAL EDUCATION SECRETARY. —Massachusetts.—Paul H. Hanus, Chn. of the State Commission on Industrial Education of Massachusetts, 15 Philip Place, Cambridge, Mass., may be addressed regarding prospective appointment of a secretary who is to be the executive officer or expert advisor to the Commission. The appointee must be a man of technical training in technical school of high grade, with successful experience in at least one important industry and one with a decided interest in industrial education. He must be an able writer and a good public speaker. Salary to start, $3,000. A Massachusetts man is preferred.

DRAFTSMEN.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on Nov. 20, 21, 22, to secure eligibles to fill vacancies in the positions mentioned below, as indicated, and other vacancies as they may occur requiring similar qualifications: Supervising Architect's Office: 20 Architectural Draftsmen (male), $1,400 to $1,800 a year; 38 Junior Architectural Draftsmen (male), $840 to $1,200 a year; two Engineer Draftsmen (structural) (male), $1,600 to $1,800 a year; five Electrical Engineers and Draftsmen (male), $1,200 to $1,600 a year; five Heating and Ventilating Draftsmen (male), $1,200 to $1,600 a year. Bureau of Animal Industry: One Junior Architectural Draftsman (male), $900 a year. Application Form No. 1,312.

INDUSTRIAL NOTES.

THE A. LIETZ CO. has returned to 632-634 Commercial St., San Francisco.

THE HARBISON-WALKER REFRACTORIES CO., Pittsburg, is transacting all business formerly transacted by the Portsmouth Harbison-Walker Co., of Portsmouth, Ohio.

THE AURORA AUTOMATIC MACHINERY CO. report the election of the following officers: John P. Hopkins, Pres.; W. O. Jacquette, First Vice-Pres.; J. D. Hurley, Second Vice-Pres.; C. E. Erikson, Treas., and A. B. Holmes, Secy.

THE ELECTRIC CONTROLLER & SUPPLY CO., Cleveland, Ohio, announces the opening of a Chicago office in the Merchants' Loan & Trust Bldg., 135 Adams St., with Mr. W. M. Connelly in charge. Mr. Connelly was formerly connected with the electrical department of the Homestead Works of the Carnegie Steel Co.

THE ALLIS-CHALMERS CO. reports a recent contract for the equipment of the Ventura County Power Co.'s plant at Ventura, Cal. The outfit will comprise a standard 300-KW. Allis-Chalmers engine type generator, designed to operate at 125 r. p. m., 50 cycles, 3-phase and 2,300 volts. The generator will be separately excited and will be driven by a Reynolds Corliss tandem compound condensing engine of the heavy duty type, 16″ and 32″ × 36″, and operating at a speed of 125 r. p. m. The engine is to be fitted with a complete electric synchronizing device, and will have valves in the heads of both cylinders.

EXHIBITS AT THE CONVENTION OF THE CENTRAL STATES WATER-WORKS ASSOCIATION.—At the annual convention of the Central States Water-Works Association, held at Cincinnati, Sept. 25 to 27, there were a large number of exhibits of water-works supplies. The names of the exhibitors are given below, followed by a statement of the nature of the exhibit where that is not indicated by the name: Modern Iron Works, Quincy, Ill., Quin See service boxes; Thomson Meter Co., Brooklyn, N. Y., Lambert meter; Pittsburg Meter Co., Pittsburg, Pa., Keystone meters; Union Meter Co., Worcester, Mass., disk, rotary and current meters; Neptune Meter Co., New York, new single-spud meters; A. P. Smith Mfg. Co., Newark, N. J., Smith patent tip machine; National Meter Co., New York, Crown Empire, National and Gem meters; Ellis-Ford Mfg. Co., Detroit, Mich., cast-iron pipe cutters; H. Mueller Mfg. Co., Decatur, Ill., brass goods, tap machine and plumbers' supplies; Ludlow Valve Mfg. Co., Troy, N. Y., valves; Lunkenheimer Co., Cincinnati, Ohio, brass and iron valves and lubricating specialties; Laidlaw-Dunn-Gordon Co., New York, disk and piston meters; Hersey Mfg. Co., South Boston, Mass., torrent rotary and disk water meters; Adjustable Clip Co., Columbus, Ohio; Safety Meter Lock Co., Columbus, Ohio; John H. McGowan Co., Cincinnati, Ohio; American Valve & Meter Co., Cincinnati, Ohio.

THE MONTREAL LIGHT, HEAT & POWER COMPANY recently contracted with the Canadian Westinghouse Company, Ltd., for a large addition to its power equipment. The apparatus contracted for is for its new Soulanges canal power station on the St. Lawrence River. The equipment consists of three Westinghouse 3,750-KW. revolving field alternating current, two-bearing generators connected to water turbines. These generators are 7,200 alternations, 4,000 volts, three-phase, operating at 225 revolutions per minute. There are also two Westinghouse 150-KW. direct current, 125-volt exciter units. Westinghouse 2,500-KW. oil-insulated, water-cooled transformers to the number of thirteen are an important part of the equipment. Seven of these transformers will be used for raising the voltage at their generating station from 4,000 to 44,000 volts, and six of them will be used at the lowering end of the transmission line, stepping down the voltage from 44,000 to 12,000. The generators and exciters will be controlled by motor-operated rheostats and the complete switchboard apparatus, which the Canadian Westinghouse Company are furnishing for both the main and substations, will involve the latest type of electrical control, representing the highest development of switchboard apparatus. This contract is among the largest recently placed in the Canadian field, and the fact that it was awarded to the Canadian Westinghouse Company, after the sharpest competition, speaks well for the estimation in which Westinghouse apparatus is held by large power users.

THE ALLIS-CHALMERS CO. reports the following as a partial list of sales in its steam engine department: American Smelters Securities Co., New York, three Reynolds reliance Corliss engines; Daly-Judge Mining Co., Park City, Utah, one Reynolds reliance Corliss engine; San Marcos Light & Power Co., San Marcos, Tex.; one Reynolds reliance Corliss engine; Freeman Mfg. Co., Kalkaska, Mich., Reynolds reliance Corliss engine; Mr. C. A. McDonall, Chicago, for shipment to South Africa, 9-in. and 16-in. × 30-in. Reynolds heavy duty tandem compound Corliss engine; H. C. F. Koch & Co., New York, Reynolds reliance Corliss engine, 200-KW. Allis-Chalmers generator; Wm. Cameron & Co., Waco, Tex., Reynolds reliance Corliss engine; City of Jackson, Jackson, Ga., Reynolds reliance Corliss engine; U. S. Envelope Co., Springfield, Mass., Reynolds reliance Corliss engine; Kansas City Cotton Mills Co., Kansas City, Mo., Reynolds reliance Corliss engine; Consolidation Coal Co., Buxton, Iowa, Reynolds heavy duty Corliss engine, 16 × 42-in. Reynolds H. D. engine, 300-KW. belted D. C. generator; Indianapolis & Louisville Traction Co., Pittsburg, Pa., two heavy duty Reynolds Corliss engines; Shenango Furnace Co., Pittsburg, Pa., three 44-in. and 84-in. × 60-in. vertical long crosshead blowing engines; Ellsworth Coal Co., Pittsburg, Pa., Reynolds reliance Corliss engine, 400-KW. D. C. Allis-Chalmers generator; International Paper Co., Ticonderoga, N. Y., Reynolds reliance Corliss engine; Atlantic Portland Cement Co., Nazareth, Pa., Reynolds heavy duty cross compound Corliss engines, two 22-in. and 44-in. × 48-in.; Reynolds heavy duty cross compound Corliss engines, three 20-in. and 40-in. × 48-in.; Reynolds heavy duty cross compound Corliss engine, 16-in. and 32-in. × 42-in.: Reynolds heavy duty cross compound Corliss engine, 20-in. and 40-in. × 42-in.: 500-KW. Allis-Chalmers generator, 400-HP. Allis-Chalmers induction motors, two 50-KW. O. F. S. C. transformers, switchboard, seven Tomlinson barometric condensers: Northwestern States Portland Cement Co., Mason City, Iowa, two Reynolds heavy duty cross compound, two-stage air compressors; Cleveland Cliffs Iron Co., Ishpeming, Mich., two Reynolds heavy duty cross compound two-stage air compressors; Mauch Chunk Heat, Power & Light Co., Mauch Chunk, Pa., Reynolds reliance Corliss engine; Eastman Kodak Co., Rochester, N. Y., Reynolds reliance Corliss engine; Somerset Coal Co., Boswell, Pa., two Reynolds heavy duty cross compound Corliss engines; Sioux Falls Electric Light & Power Co., Sioux Falls, S. Dak., one Reynolds reliance Corliss engine; Johnson Wentworth Co., Cloquet, Minn., Reynolds heavy duty Corliss engine.

TRADE PUBLICATIONS.

PUMPING MACHINERY.—Weinman Machine Works, Columbus, Ohio.

This folder illustrates and briefly describes the boiler feed pumps, mine pumps, and deep well pumps manufactured.

BOILER APPLIANCES.—The Vulcan Bearing Bar Co., 250 N. Main St., Wilkes-Barre, Penn.

The principal appliance presented in this folder is a drop-door bearing bar for disposing of the ashes and dirt that accumulate on a boiler-room floor.

VALVES.—Coffin Valve Co., Boston, Mass. Paper; 9 × 11 ins.; pp. 21; illustrated.

This publication illustrates and describes sluice and gate valves for water-works, filtration systems, and power plants. In addition, speed stands for operating gate and sluice valves, and sewer gates, are also presented.

ELECTRIC SWITCHES.—H. Krantz Mfg. Co., 160-166 Seventh St., Brooklyn, N. Y. Bulletin No. 18. Paper; 7 × 10 ins.; pp. 16; illustrated.

Knife switches, both fused and unfused, for 125, 250 and 500-volt circuits are here illustrated and listed. Fuse blocks and terminal lugs are also included in this bulletin.

TRUNNION BASCULE BRIDGES.— Strauss Bascule & Concrete Bridge Co., Chicago, Ill. Catalogue No. 1. Paper: 10 × 6¾ ins.; pp. 66; illustrated.

The Strauss trunnion bascule bridge is described and its advantages over other types of bascule bridges noted. The greater part of the catalogue is devoted to illustrations, dimensional line cuts and brief descriptions of installed or proposed bridges.

ELECTRIC WIRING SPECIALTIES.—General Electric Co., Schenectady, N. Y. Catalogue No. 3463. Board; 4 × 7 ins.; pp. 345; illustrated.

This publication consists of two parts, the first part illustrating and describing lamp sockets, receptacles, shade holders and shades, plugs, cut-outs, cord adjusters, porcelain cleats, insulators, fuses, switches, circuit breakers and cabinets; and the second part is a price list of these specialties.

ROCK DRILLS.—Ingersoll-Rand Co., 11 Broadway, New York City. Catalogue No. 45B. Paper: 6 × 9 ins.; pp. 96; illustrated.

The catalogue gives a complete description of the different types of rock drills handled by the company, besides tabulated specifications and capacities of each type and size of drill, with remarks on the kind of work each is adapted to do. Drill mountings and accessories are also listed. Tables of useful information on compressed air are appended.

DRAINAGE EXCAVATOR.—F. C. Austin Drainage Excavator Co., Chicago, Ill. Paper: 10 × 7 ins.; pp. 16; illustrated.

The Austin excavator produces a ditch that is true to grade, with banks sloped at any desired angle, while the earth is left smooth and hard. The catalogue describes the operation of these excavators and notes the advantages that obtain by their use. The larger part of the catalogue is devoted to illustrations showing the condition of ditches excavated by these machines after several years of service.

AIR COMPRESSORS.—Allis-Chalmers Co., Milwaukee, Wis. Bulletin No. 1507. Paper: 8 × 10½ ins.; pp. 40; illustrated.

This bulletin opens with an interesting description of compressed air productions, and gradually leads up to the Allis-Chalmers Co.'s practice in this direction. Several of their leading types of engines are illustrated, and many of the details are given special attention by separate illustrations and descriptive matter. Much useful information for compressed air users is given in the last pages of the bulletin.

WOOD PAVEMENT.—The Powell Wood-Process Syndicate, Ltd., 28 Fleet St., London, E. C. Paper: 4 × 9 ins.; pp. 6.

This pamphlet treats of Powellite wood pavement, consisting of wood blocks impregnated with a saccharine solution to which is added a strong antiseptic and then rapidly dried. Their principal characteristics are stated to be a smooth even surface, non-absorbent, minimum resistance to traction, noiselessness and durability, no offensive substance or odors given off, and that they are not slippery and are easily cleaned and repaired.

WATERPROOFING FOR CONCRETE AND MASONRY.—Standard Waterproofing Co., 620 W. Washington st., Indianapolis, Ind. 3 × 5 ins.; pp. 11.

The waterproofing preparation described in this leaflet is a liquid preparation applied with a brush and is stated not to change the color of the surface to which it is applied. A gallon covers over 100 sq. ft. of surface, and one coat is sufficient to make concrete waterproof. The material is recommended for preventing efflorescence on stone and brick work, as well as waterproofing walls below the ground level, concrete blocks, etc.

LIGHTING SYSTEMS.—The Bolte & Wayer Co., 223-225 Michigan St., Chicago, Ill. Paper: 6 × 8¼ ins.; pp. 20; illustrated.

Gasoline lighting systems employing mantle burners for circuses, street fairs, carnivals and also for contractors and bridge erectors' use are fully taken up in this pamphlet. Each mantle develops 500 c. p., and twelve of these can be operated 4 hrs. with 2 gals. of ordinary stove gasoline.

For other Proposal Advertisements see pages 51, 52, 53, 54, of Advertisements and Construction News page 148.

BRIDGE.

Reading, Pa.

Sealed proposals will be received at this office up to 10 a. m., Friday, November 2d, 1906, for the building of a two, 25-ft. span concrete arch bridge, to be known as Treichlers Bridge, in Hereford Township, Berks County, Pa. Alternative bids for a two, 25-ft. or one 50-ft. span reinforced concrete bridge will be entertained.

Plans and specifications and necessary information may be secured on application to the County Commissioner's office, Reading, Pa.

All bids must be accompanied by a certified check equal to 10% of the aggregate amount of the bid. The right is reserved to reject any or all bids.

H. F. LIVINGOOD,
County Controller.

17-1t

COLLECTION AND DISPOSAL OF GARBAGE.

Rochester, N. Y.

Notice is hereby given that sealed proposals will be received at the office of the Clerk of the Board of Contract and Supply, No. 28 City Hall, until 10 o'clock a. m., November 7, 1906, for the collection and sanitary disposal of the garbage and dead animals of the City of Rochester for a period of five years, beginning January 1, 1907.

The attention of bidders is called to the following requirements:

The bidder will name in his proposal the process or method which he intends to use for the disposal of the garbage and dead animals. No process or method of disposal or reduction shall be used, nor will any bids be accepted, under these specifications, unless the system, process, or method proposed has been in actual, practical and successful use in at least one city of the United States for at least two years immediately preceding the date of the bid, nor unless the bidder shall produce satisfactory evidence to the Board of Contract and Supply of the fact that he is possessed of, and has an unqualified right to use the process he proposes for the disposal of the garbage and dead animals of the City of Rochester, nor unless the process proposed shall be sufficiently described to enable the said board to judge of its capability to satisfactorily dispose of all garbage and dead animals of the City of Rochester.

Previous to the execution of the contract the successful bidder shall satisfy the said Board of Contract and Supply that he has not less than $100,000 available for the construction of a disposal plant, and the purchase of equipment; and he must further have obtained a suitable site for the erection of a disposal plant, and own in fee, or control for the term of this contract, not less than forty acres of land outside of the City of Rochester available for the disposal of garbage by burial, convenient for use, during the time provided in the contract for constructing the disposal plant, and in the event of a temporary breakdown of said plant, or a temporary suspension of its operation from any cause whatsoever. The duration of any such necessary suspension shall be determined by the Commissioner of Public Works and the City Engineer.

The attention of bidders is called to the conditions of the specifications providing that the city may purchase the disposal plant or collection plant, or both, of the contractor, at the end of the five-year period, if it elects so to do.

Each bidder must furnish with his bid a certified check payable to the order of the Treasurer of the City in the sum of $10,000, which sum shall be forfeited to the city in case the bidder depositing the same shall be awarded the contract and shall not execute the same and furnish the bond required within fifteen (15) days after the contract is awarded to him.

A cash deposit of $10,000, and a bond for the faithful performance of the contract in the penal sum of $50,000, will be required.

All bids must be indorsed with the title of the work to which they relate, the name of the bidder and his residence. Information relative to the work may be procured at the City Engineer's office, on the fifth floor of the City Hall, where specifications and bidding sheets may be obtained after October 20, 1906.

All bids must be upon the bidding sheets which will be furnished by the City Engineer.

The Board of Contract and Supply reserves the right to reject all bids and re-advertise the work if it shall be deemed for the best interests of the city.

F. X. PIFER,
17-2t Clerk.

DEPARTMENT OF THE INTERIOR, Office of Superintendent U. S. Capitol Building and Grounds, Washington, D. C., October 22, 1906.—Sealed proposals (in duplicate) will be received and opened at the above office on Wednesday, November 21, 1906, for furnishing and putting in place, interior marble work, for the rotunda and main stair hall section of the Senate Office Building. Bidders will be required to furnish with their proposals, a certified check or surety bond in the sum of 2% of the amount of their bid. Specifications and plans iwll be sent to competent intending bidders upon the receipt of a certified check in the sum of Twenty-five ($25.00) Dollars, as a guarantee for the return of the plans. The right is reserved to reject any or all proposals as set forth in the proposal form, and to waive any informality or technicality. ELLIOTT WOODS, Superintendent U. S. Capitol Building and Grounds. Approved, E. A. HITCHCOCK, Secretary. 17-3t

SEWERS.

Cleveland, Ohio.

Sealed proposals will be received at the office of the Secretary of the Board of Public Service, No. 105 City Hall, until 12 o'clock M., November 13, 1906, for the construction of the following sewers between the points mentioned, to wit:

A portion of the Main Intercepting Sewer in Lakeside Avenue, N. E., between East 40th Street and East 33d Street.

A portion of the Main Intercepting Sewer in Lakeside Avenue, N. E., between East 33d Street and East 26th Street.

Contractors may obtain plans and specifications by depositing with the City Engineer a certified check for Ten ($10.00) Dollars for each set, made payable to the Board of Public Service, which check will be returned upon the return of the plans and specifications in good condition not later than November 20, 1906.

Plans and specifications may be seen and blank proposals can be obtained at the office of the Chief Engineer, after October 30, 1906.

Each proposal must contain the full name of the party or parties making the same, and all persons interested therein, and must be accompanied by a certified check for Six Thousand ($6,000.00) Dollars each for the Main Intercepting Sewer between East 40th St. and East 33d St., and the Main Intercepting Sewer between East 33d St. and East 26th Street, payable to the Board of Public Service, on a solvent bank in the city, as surety that if the proposal is accepted a contract will be entered into.

No proposals will be entertained unless made on the blanks furnished by the Chief Engineer and delivered at the office of the Secretary of the Board of Public Service, No. 105 City Hall, previous to 12 o'clock M. on the day specified.

The city reserves the right to reject any or all bids.

W. J. SPRINGBORN,
President Board of Public Service.
Countersigned: A. R. CALLOW,
17-2t Secretary Board of Public Service.

BOILER PLANT.

Commonwealth of Massachusetts,
Charles River Basin Commission,
Boston, Mass.

Sealed proposals will be received at the office of the Charles River Basin Commission, 367 Boylston Street, Boston, Mass., until 2.30 o'clock P. M. of Monday, November 12, 1906, for furnishing and erecting a boiler plant, consisting of two boilers, with settings, grates, fronts, feed and blow-off piping, gages, flue, and all other details necessary. The boilers are to be of the horizontal return tubular type, 48 inches in diameter and about 16 feet long, and each boiler is to have 52 tubes 3 inches in diameter. Each bid must be accompanied by a plan showing the boiler which the bidder proposes to furnish, giving all essential dimensions, location of manhole, nozzles, blow-off, etc.; a plan showing the setting proposed; a plan of the front; and a list of the manufacturers of the various fittings. Pamphlets containing further information for bidders, forms of proposal, contract and specifications will be mailed to contractors who apply to the Chief Engineer, or may be obtained at his office, No. 367 Boylston Street, Boston, where also plans may be seen. The printed form must be used in making proposals. The Commission reserves the right to reject any or all proposals and to accept the proposal deemed best for the Commonwealth. HENRY S. PRITCHETT, Chairman; HENRY D. YERXA, JOSHUA B. HOLDEN, Charles River Basin Commission; HIRAM A. MILLER, Chief Engineer; WILLIAM S. YOUNGMAN, Secretary. 17-2t

SEWER.

Grand Haven, Mich.

Sealed proposals will be received until two o'clock p. m., Thursday, November 7, 1906, for the construction of approximately twelve (12) miles of sewers, ranging from eight (8") inches to sixty (60") inches in diameter, together with all appurtenances. All sewers twenty-seven (27") inches in diameter and larger will be constructed of brick or concrete, and the smaller sized sewers will be laid with vitrified sewer pipe, all in accordance with plans and specifications now on file with the City Clerk of the City of Grand Haven.

Proposals must be made upon printed blanks, to be furnished by the City Clerk, and as evidence of good faith and guaranty that contract will be entered into and good and sufficient bond furnished should award be made thereon, each proposal must be accompanied by a certified check for One Thousand ($1,000.00) Dollars, payable to Ane Van Toll, the City Treasurer of Grand Haven.

Proposals must be addressed to the City Council, Grand Haven, Mich., and marked "Proposal for Construction of Sewer System."

The City Council reserves the right to reject any and all bids and waive defects. It also reserves the right to adjust the quantity of work to suit the appropriation.

By order of the Common Council.

LEWIS A. GORHAM,
City Clerk.

THE RIGGS & SHERMAN CO.,
Toledo, Ohio,
Consulting Engineers. 17-2t

CIVIL SERVICE EXAMINATIONS—NEW YORK STATE.

Examinations will be held November 17, 1906, for the following positions:
Open to residents of New York State:
Chainman, State Engineer's Department, $2.50 a day.
Open to residents and non-residents.
Leveler, $4.50 to $5.00 a day.
Rodman, $3.50 to $4.00 a day.
Inspectors, State Commission of Gas and Electricity, $1,000 to $1,800.
For further particulars and application blank, address

CHIEF EXAMINER,
State Civil Service Commission.
17-1t Albany, N. Y.

WATER-WORKS AND SEWER.

Lander, Wyo.

The Town Council of the Town of Lander will receive and open bids November 6th, 1906, at 8 o'clock P. M., for the construction of a complete water-works and sewer system, $50,000.00 water system and $25,000.00 sewer system. Plans and specifications on file with the Town Clerk. 17-2t

Situations Wanted

Mechanical and Electrical Engineers.

MECHANICAL ENGINEER, technical graduate, 4½ years' experience with first-class concerns in Europe and this country in water turbines, hydraulic governors, centrifugal pumps, plunger pumps and hydraulic tool machines—water turbines specialty—wants to change position. Address "K. A. 17," Engineering News, New York. 17-2t

Civil Engineers.

CIVIL ENGINEER—15 years' resident, division and locating engineer charge heavy railroad construction, difficult railroad locations, tunnels, deep foundations, wishes engagement. Address "D. A. 12," Engineering News, New York. 17-1t

CIVIL ENGINEER, 32 years old, experienced on designing and detailing of steel bridges, roofs, open and pneumatic foundations, and contractors' plant, wants position. Address "C. 17," Engineering News, New York. 17-3t

CIVIL ENGINEER (25), Columbia University, experienced steel construction, erection, instrument work, general contracting, desires outside work. Address "P. A. 17," Engineering News, New York. 17-1t

POLYTECHNIC STUDENT, '08, in civil engineering, desires position in the line. Address "R. A. 17," Engineering News, New York. 17-1t

Bridge and Structural Engineers.

A1 DESIGNER, with large structural and reinforced concrete experience, capable of taking charge of office and making designs for complete manufacturing plants, desires suitable position. Best of references. Address "H. A. 17," Engineering News, New York. 17-2t

DESIGNER AND DETAILER of bridge and structural work, technical graduate, two years' experience, wants position in New York City as designer. Address "E. A. 17," Engineering News, New York. 17-1t

Surveyors.

YOUNG MAN (20 years), 1 year's experience as chainman and computer, 4 year Cooper Union student, desires position with an engineering concern. Address J. BENDEL, 647 East Ninth St., New York. 17-1t

EXPERIENCED SURVEYOR and topographical draftsman desires engagement of some important character. Address "G. A. 17," Engineering News, New York. 17-4t

COOPER UNION STUDENT (21), having 5 years' experience at drafting and 1 year at surveying, seeks position. Address "H. A. 13," Engineering News, New York. 17-1t

Draftsmen.

CIVIL ENGINEERING STUDENT desires position as draftsman, sole object being to gain practical experience in the line. Address "D. A. 17," Engineering News, New York. 17-1t

Superintendents, Misc., etc.

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